

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

SRI LANKA COVID 19 EMERGENCY RESPONSE AND HEALTH SYSTEM PREPAREDNESS PROJECT



MINISTRY OF HEALTH AND INDIGENOUS MEDICAL SERVICES

Table of Contents

LIST OF ABBREVIATIONS.....	7
1. INTRODUCTION.....	8
1.1 BACKGROUND	8
1.2 PROJECT DESCRIPTION.....	9
1.2.1 COMPONENT DESCRIPTION	9
1.2.2 PROJECT BENEFICIARIES	14
1.3 OBJECTIVES OF THE ESMF	14
2. ASSESSMENT OF RELEVANT POLICY, LEGAL AND REGULATORY FRAMEWORK OF SRI LANKA	16
2.1 EXISTING HEALTH CARE WASTE MANAGEMENT FRAMEWORK IN SRI LANKA	16
2.1.1 DRAFT NATIONAL POLICY ON HEALTHCARE WASTE MANAGEMENT	16
2.1.2 DRAFT NATIONAL GUIDELINES ON HEALTH CARE WASTE MANAGEMENT	17
2.1.3 NATIONAL CODE OF HYGIENE.....	18
2.1.4 NATIONAL COLOR CODE.....	18
2.1.5 INFECTION CONTROL MANUAL	18
2.1.6 COVID-19 SPECIFIC GUIDELINES ISSUED BY THE MINISTRY OF HEALTH.....	19
2.1.7 EXISTING ORGANIZATIONAL STRUCTURE FOR NATIONAL IMMUNIZATION PROGRAMME.....	19
2.2 ENVIRONMENTAL LEGISLATION	21
2.2.1 THE NATIONAL ENVIRONMENTAL ACT	21
2.2.2 THE ANTIQUITIES ORDINANCE No 9 OF 1940	22
2.2.3 THE AGRARIAN DEVELOPMENT ACT No 46 OF 2000.....	22
2.2.4 DISASTER MANAGEMENT ACT.....	22
2.2.5 THE URBAN DEVELOPMENT AUTHORITY ACT No. 41 OF 1978 AND THE SRI LANKA LAND RECLAMATION & DEVELOPMENT CORPORATION ACT No. 15 OF 1968.....	23
2.3 SOCIAL POLICIES AND REGULATIONS	23
2.3.1 KEY LEGISLATURE AND REGULATIONS RELATED TO LAND.....	23
2.3.2 LEGISLATURE AND LAWS RELATING TO WOMEN AND VULNERABLE GROUPS	24
2.3.3 LABOR LAWS AND REGULATIONS.....	26
2.3.4 SOCIAL ISSUES IN HEALTH POLICIES	26
2.3.5 COMMUNITY CONSULTATIONS AND INFORMATION DISCLOSURE	29
3. OVERVIEW OF THE WORLD BANK’S ENVIRONMENTAL AND SOCIAL FRAMEWORK, RELEVANT ENVIRONMENTALAND SOCIAL STANDARDS	30
3.1 THE WORLD BANK’S ENVIRONMENTAL AND SOCIAL FRAMEWORK.....	30
ESS1 - ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS	31
ESS2 – LABOR AND WORKING CONDITIONS	32

ESS3 – RESOURCE EFFICIENCY AND POLLUTION PREVENTION AND MANAGEMENT.....	32
ESS4 – COMMUNITY HEALTH AND SAFETY	32
ESS5 – LAND ACQUISITION, RESTRICTIONS ON LAND USE AND INVOLUNTARY RESETTLEMENT.....	33
ESS6 – BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES	33
ESS7 – INDIGENOUS PEOPLES/SUB-SAHARAN AFRICAN HISTORICALLY UNDERSERVED TRADITIONAL LOCAL COMMUNITIES	34
ESS8 – CULTURAL HERITAGE.....	34
ESS9 – FINANCIAL INTERMEDIARIES	34
ESS10 – STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE	35
3.2 WORLD BANK’S EHS GUIDELINES.....	35
3.3 WHO GUIDELINES.....	36
 4. ENVIRONMENTAL AND SOCIAL BASELINE AND STATUS WITH REGARD TO HEALTH CARE WASTE MANAGEMENT	 38
 4.1 PROJECT LOCATIONS	 38
4.2 BASELINE OF SOCIO-ECONOMIC FACTORS/ISUES	39
4.2.1 DEMOGRAPHY	39
4.2.2 ECONOMY.....	40
4.2.3 LABOR MARKET.....	42
4.2.4 HUMAN DEVELOPMENT	44
4.2.5 POVERTY	46
4.2.6 GENDER	47
4.2.7 VULNERABLE GROUPS	48
4.2.8 LAND AND CULTURAL RESOURCES.....	51
4.3 OVERVIEW OF SRI LANKA’S HEALTH SECTOR	53
4.3.1 PREVENTIVE PUBLIC HEALTH CARE (PHC) PROVIDERS.....	53
4.3.2 CURATIVE PUBLIC HEALTH CARE SERVICES	54
4.3.3 REFERRAL FACILITIES.....	54
4.3.4 EMERGENCY CARE	55
4.3.5 PRIVATE HEALTH CARE PROVIDERS.....	56
4.3.6 HEALTH SECTOR ADMINISTRATION.....	56
4.3.7 INDIGENOUS SYSTEMS OF HEALTH CARE	56
4.3.8 SERVICE AVAILABILITY	57
4.4 COVID-19 IN SRI LANKA	58
4.4.1 SNAPSHOT OF COVID-19 CASES AND SERVICES.....	58
4.4.2 LATEST COVID-19 SITUATION IN THE COUNTRY (AS OF EARLY APRIL 2021).....	59
4.4.3 NATIONAL INSTITUTE FOR INFECTIOUS DISEASES	61
4.5 OVERVIEW OF THE HEALTH CARE WASTE MANAGEMENT IN THE PUBLIC SECTOR HEALTH FACILITIES	62
4.5.1 PRODUCTION OF SOLID HCW	63
4.5.2 WASTE SEGREGATION.....	66
4.5.3 WASTE TREATMENT TECHNOLOGIES AND DISPOSAL OPTIONS	66
4.5.4 PRODUCTION AND TREATMENT OF LIQUID HEALTH CARE WASTE	68
4.5.5 STATUS WITH ENVIRONMENT PROTECTION LICENSE/SCHEDULE WASTE LICENSE (EPL/SWL)	69

4.5.6	CURRENT CHALLENGES WITH REGARD TO HCWM	70
4.5.7	ADDRESSING AND MITIGATING THE RISKS ASSOCIATED WITH HCWM.....	71
4.6	HOSPITAL ASSOCIATED INFECTION CONTROL	71
4.7	IMPLEMENTATION CHALLENGES & LESSONS LEARNT FROM THE PARENT PROJECT	73
5.	POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION	76
5.1	ENVIRONMENTAL AND SOCIAL RISK CLASSIFICATION AS PER THE WORLD BANKS' RISK CLASSIFICATION	76
ESS1:	ASSESSMENT AND MANAGEMENT OF ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS	77
ESS2:	LABOR AND WORKING CONDITIONS	80
ESS3:	RESOURCE EFFICIENCY, POLLUTION PREVENTION AND MANAGEMENT	81
ESS4:	COMMUNITY HEALTH AND SAFETY	81
ESS5:	LAND ACQUISITION, RESTRICTIONS ON LAND-USE AND INVOLUNTARY RESETTLEMENT	84
ESS6:	BIODIVERSITY CONSERVATION AND SUSTAINABLE MANAGEMENT OF LIVING NATURAL RESOURCES	84
ESS7:	INDIGENOUS PEOPLES/SUB-SAHARAN AFRICAN HISTORICALLY UNDERSERVED TRADITIONAL LOCAL COMMUNITIES	84
ESS8:	CULTURAL HERITAGE	85
ESS9:	FINANCIAL INTERMEDIARIES	85
ESS10:	STAKEHOLDER ENGAGEMENT AND INFORMATION DISCLOSURE	85
5.2	RISKS RELATING TO VULNERABLE GROUPS, INCLUSION AND SOCIAL COHESION.....	87
5.3	RISKS ASSOCIATED WITH THE DEPLOYMENT OF SECURITY PERSONNEL.....	89
5.4	ENVIRONMENTAL AND SOCIAL RISKS OF THE PROJECT AND RISK MITIGATION	94
5.4.1	PLANNING AND DESIGN STAGE	94
5.4.2	CONSTRUCTION STAGE.....	98
5.4.3	OPERATIONAL STAGE.....	99
5.4.4	DECOMMISSIONING STAGE	101
6.	PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES	102
6.1	STEP 1: SCREENING SUB-PROJECTS FOR POTENTIAL E&S ISSUES AND CLASSIFYING RISK LEVELS.....	102
6.2	STEP 2: CONDUCTING E&S ASSESSMENT AND DEVELOPING SUBPROJECT-SPECIFIC E&S INSTRUMENTS:	103
6.2.1	PROCEDURES FOR SUB-PROJECTS THAT INVOLVE PHYSICAL INTERVENTIONS AND CONSTRUCTION WORK	103
6.2.2	COVID-19 SPECIFIC ASSESSMENTS AND MITIGATION MEASURES.....	106
6.2.3	MANAGEMENT OF OCCUPATIONAL HEALTH AND SAFETY	109
6.2.4	MEASURES FOR ENSURING EQUITABLE ACCESS TO INFORMATION AND SERVICES.....	111
6.2.5	MEASURES FOR ADDRESSING GBV, SEA/SH RISKS AND IMPACTS	112
6.2.6	MANAGING RISKS OF USE OF SECURITY FORCES IF MILITARY/SECURITY FORCES ARE INVOLVED IN PROJECT ACTIVITIES	113
6.2.7	MANAGEMENT OF E&S DURING CERC COMPONENT IMPLEMENTATION	114
6.3	STEP 3: CONSULTATION AND DISCLOSURE OF E & S INSTRUMENTS	114
6.4	STEP 4: REVIEW AND APPROVAL OF E & S INSTRUMENTS	115
6.5	STEP 5: COMPLIANCE MONITORING AND REPORTING.....	115
7.	STAEKHOLDER ENGAGEMENT, GRIEVANCE REDRESS AND INFORMATION DISCLOSURE.....	117

7.1	STAKEHOLDER ENGAGEMENT PLAN.....	117
7.2	GRIEVANCE REDRESS MECHANISM	117
7.3	CONSULTATIONS AND INFORMATION DISCLOSURE.....	117
8.	<u>INSTITUTIONAL AND INSTIUTIONAL ARRANGEMENTS.....</u>	118
8.1	OVERALL PROJECT IMPLEMENTATION ARRANGEMENTS	118
8.2	ARRANGEMENTS FOR THE IMPLEMENTATION OF THE ESMF	123
8.3	ESF TRAINING FOR STAFF IMPLEMENTING THE PROJECT.....	126
8.4	ROUGH COST ESTIMATES FOR ESMF IMPLEMENTATION	128

Annexes – Volume II

TABLE OF CONTENTS FOR THE ANNEX		PAGE
Annex 1	Map of Sri Lanka	2
Annex 2	Resource List : COVID-19 Guidance	4
Annex 3	Health Care Waste Management in Sri Lanka Health Sector – Summary of a Rapid Survey	7
Annex 4	Environmental & Social Management Plan for Implementation of COVID-19 Response Sub-sectors	57
Annex 5	Screening form for Potential Environmental and Social Issues	96
Annex 6	Generic Infection Control and Health Care Waste Management Plan for COVID-19 Response in HCF	99
Annex 7	Infection Control and Prevention Protocol	140
Annex 8	Template Infection Control and Health Care Waste Management Plan	142
Annex 9	Minimal Provisions to be Included in Contract Documents	147
Annex 10	Terms of Reference for the Recruitment of Contractor Environmental Safeguards Officer	149
Annex 11	Generic Monitoring Plan for Environmental and Social Parameters for Construction Phase of Sub-sectors	151
Annex 12	Typical Structure of an Environmental and Social Impact Assessment	159
Annex 13	Standard Operating Procedures for Laboratories	161
Annex 14	Standard Positive List of Goods, Services and Works and Prohibited Activities as per the World Bank CERC Operational Manual Template	165
Annex 15	Environmental and Social Compliance Monitoring Checklist for Sub-projects in Implementation	169
Annex 16	Special Monitoring Checklist for Ensuring Safe Conditions for Workers & Public during Construction Projects	171
Annex 17	Generic Training Plan for Project Implementation Agency Staff Training on ESMF implementation, monitoring and Reporting	173
Annex 18	Guidelines for Occupational Health and Safety Management of Workers, Community and Visitors during construction	176
Annex 19	Examples of Information Posters and Best Practice Examples on Health Care Waste Management	178
Annex 20	COVID-19 Considerations in construction/Civil works	186

LIST OF ABBREVIATIONS

BH	Base Hospital
COVID	Corona Virus Disease
CoV	Corona Virus
DGHS	Director General of Health Services
DH	District Hospital
EHS	Environment, Health and Safety
EPL	Environmental Protection License
ESS	Environment and Social Standard
ESMP	Environment and Social Management Plan
ESMF	Environment and Social Management Framework
ESIA	Environment and Social Impact Assessment
GRM	Grievance Redressal Mechanism
HCF	Health Care Facility
HCWM	Health Care Waste Management
HCWMP	Health Care Waste Management Plan
ICU	Intensive Care Unit
L&FS	Life & Fire Safety
LMP	Labour Management Procedure
MOH/MOHIMS	Ministry of Health/Ministry of Health and Indigenous Medical Services
MRI	Medical Research Institute
NCCWM	National Committee on Clinical Waste Management
NDVP	National Deployment and Vaccination Plan
PCR	Physical Cultural Resources
PDHS	Provincial Director of Health Services
PPE	Personal Protective Equipment
PMCU	Primary Medical Care Unit
PSA	Pressure Swing Adsorption
QTC	Quarantine and Testing Centers
RDHS	Regional Director of Health Services
SEP	Stakeholder Engagement Plan
SEA/SH, GBV	Sexual Exploitation and Abuse/Sexual Harassment
SLCM	Sri Lanka College of Microbiologists
SMoPCLGA	State Ministry of Provincial Councils & Local Government Affairs
WHO	World Health Organization

1. INTRODUCTION

1.1 BACKGROUND

The objective of the Sri Lanka COVID-19 Emergency Response and Health Systems Preparedness Project (P173867) is to respond to and mitigate the threat posed by COVID-19 and strengthen national systems for public health preparedness in Sri Lanka. The project comprises five components: (i) Emergency COVID-19 Response; (ii) Strengthening national and sub-national institutions for prevention and preparedness; (iii) Strengthening multi-sectoral, national institutions and platforms for one-health; (iv) Implementation Management and Monitoring and Evaluation; and the (v) Contingent Emergency Response Component.

The project also involves one additional financing (AF) for a) temporary cash & in-kind transfers and two AFs b) for COVID 19 vaccine deployment. The AF (AF1) for cash & in-kind transfers will enable high-risk populations to continue social distancing and remain at home as a preventive measure mitigating their risk of morbidity and mortality due to COVID-19. More specifically, the AF for cash & in-kind transfers supports the scale up of cash transfers through existing programs for the elderly, persons with disabilities and CKD patients, cash transfers for those who have lost their livelihoods and in-kind support for families in quarantine. The AF for COVID-19 vaccines (AF2) will ensure effective deployment of safe and effective vaccines in Sri Lanka through vaccination system strengthening, enabling equitable access to COVID-19 vaccines, and to further strengthen preparedness and response activities under the parent project. The proposed AF is (AF3) financial support to scale up the support the current efforts for vaccine procurement and deployment (same scope as in the case of AF2).

Given the emergency response nature of the project, details of the specific sub-projects were not available, hence site specific social and environmental assessments and mitigation plans cannot be prepared at this stage. Therefore this Environmental and Social Management Framework (ESMF) was prepared outlining a framework for environmental and social management for the Project, and providing details of potential environmental and social issues, and guidelines on assessing environmental and social risks of sub-projects through appropriate environmental and social screening, followed by an environmental and social impact analysis, as required. This ESMF was prepared in accordance with the World Bank's Environmental and Social Framework (ESF) and will also serve as a basis in the preparation of recommended sub-project specific instruments such as Environmental and Social Impact Assessments and/or Environmental and Social Management Plans (ESMPs). Thus, the ESMF was submitted in lieu of a project ESIA and has formed the basis for appraising the environmental and social aspects of the project.

As part of guidance provided in the ESMF, other E&S instruments and management tools required by the ESF have also been prepared, such as a generic Health Care Waste Management Plan (HCWMP), the Stakeholder Engagement Plan (SEP) and the Labor Management Procedures (LMP). The details of when these instruments and tools implemented, together with the party responsible for doing so, is set out in the project's Environmental and Social Commitment Plan (ESCP).

This ESMF is structured along the following sections: Project Description, Policy, Legal and Regulatory Framework, Environmental and Social Baselines, Potential Environment and Social Risks and Mitigation, Procedures to Address Environmental and Social Issues, Consultation and Disclosure, Stakeholder Engagement, Project Implementation Arrangements, Responsibilities and Capacity Building. In addition, key annexes include: Screening Form for Potential Environmental and Social Issues, generic Environmental and Social Management Plan (ESMP), Infection Control and Waste Management Plan (ICWMP) and Resource List: COVID-19 Guidance.

1.2 PROJECT DESCRIPTION

The objective of the Sri Lanka COVID-19 Emergency Response and Health Systems Preparedness Project (P173867) is to respond to and mitigate the threat posed by COVID-19 and strengthen national systems for public health preparedness in Sri Lanka. The project comprises five components as described below.

1.2.1 Component Description

Component 1: Emergency COVID-19 Response (Indicative Amount: Total US\$ 80 million)

This component will focus on limiting local transmission of COVID-19 through containment strategies and strengthening systems to mitigate future risks. It will support capacity strengthening for contact tracing, case finding, confirmation, reporting, and strengthen capacities of the MoH to respond to surge capacity through trained and well-equipped health workers and medical officers and equipped facilities. It will further strengthen the country's secondary and tertiary hospitals by investing in upgrading existing surveillance and laboratory systems to enhance their preparedness and capacity for both immediate responses, as well as for any future infectious disease outbreaks and health emergencies. This component will further support the purchase and deployment of the COVID-19 vaccines that meet World Bank regulatory standards and aid in strengthening the necessary health systems required for safe, effective and successful vaccine deployment

a. Subcomponent 1.1: Strengthening Health System Response

Strengthening Surveillance and Response Systems. Investments will be made to enhance existing surveillance systems and case detection by (a) establishing an Emergency Operation Center at the Disaster Response and Management unit at the National level to improve coordination and timeliness of national level activities in emergencies of pandemic nature; (b) training medical officers of health, public health inspectors and public health midwives in case identification, contact tracing, prevention counselling (including risk communication) and reporting through the existing surveillance information, based on standard guidelines to ensure standardized and uniform service delivery; (c) engaging the public health inspectors and public health midwives in implementing non-pharmaceutical interventions (NPIs) such as counselling on handwashing, sanitizing and cleaning surfaces, etc., to patients at primary medical care institutions and during planned home visits; and (d) providing the public health cadres mobility support and personal and protective equipment (PPE) to undertake field level follow up and support, in particular to those who are self-isolated or quarantined in their homes. Women health workers in particular may require additional support with transport.

Strengthening capacity for emergency response. Secondary and tertiary hospitals and hospital staff will be supported to continue uninterrupted health service delivery by (a) developing an emergency preparedness plan and response protocols, including constituting emergency response teams in facilities to cater to both regular and infectious disease (and managing any other natural or man-made disasters) patients and a plan for re-deployment of health staff to address surges in potential 'hotspots' (b) equipping all hospital staff with necessary PPEs and cleaning supplies, (c) training all hospital staff to prevent intra-hospital infections, particularly medical waste management and disposal systems, management of patients with infectious diseases and dead bodies of patients with COVID like illnesses, (d) instituting a system to monitor the same, and (e) putting in place safe transportation facilities for infectious disease patients starting with testing to hospital admission (As COVID-19 patients may visit any health facility for consultation,

procurement of essential personal and protective equipment, diagnostic and other essential items (as necessary, and assessed at the central level) will be provided across all facilities from tertiary to the primary level to enhance their capacity and ability to respond. All facilities will also be supported to re-organize patient flows to limit transmission within healthcare facilities, given the risk of patients and healthcare workers becoming infected within the hospital.

Setting up isolation wards and strengthening capacity of intensive care units (ICUs). As part of local containment measures, local isolation units will be established in select tertiary and secondary hospitals, to ensure there is at least one such facility in each district in the country. With the growing incidence of infected patients, to protect ongoing health services, and prevent hospitals from becoming hotspots of infection, temporary isolation wards will be set up in identified public buildings such as community centers, government training centers etc. A concerted effort will be made to ensure separate and safe spaces for women and children in the isolation wards, including separate toilet facilities. Gender-based violence (GBV) and Child Protection protocols will be developed and implemented at quarantine facilities and during self-isolation.

In addition, to cater to the expected increase in patients requiring intensive care, ICUs will be established and relevant equipment such as oxygen delivery units, ventilators will be made available in select secondary and tertiary care hospitals based on an assessment of needs. This will not only support the immediate crisis, but also strengthen the capacity of hospitals for any future response. Investments will also be made towards the installation of solar photovoltaics (solar PV) and battery energy storage based renewable energy (RE) systems at critical response facilities and select facilities that face regular electricity outages, which is critical for cold chain management and uninterrupted delivery of services.

Community Engagement and Risk Communication. Communication material on COVID-19 and general preventive measures such as “dos” and “don’ts” for the general public will be developed and deployed through various communication channels, such as mass media (TV, radio etc.). Public health workers, public education institutions, provincial councils and religious and community leaders as feasible would also be provided the communication material (posters, short videos that can be played on the mobile phone etc.) to be disseminated to ensure that consistent and correct messaging is reaching the public. Training modules, slide sets and videos for training of health workers, other field level social workers and child rights promotion officers will also be developed. A toll-free call-in number to provide information, counselling and medical advice to citizens related to COVID-19 has already been put in place. This may be strengthened to ensure there is easy access and support as the number of patients and concerns among the general population rises. Information on the hotline could be updated with new automated workflows that route clients seeking information to specific COVID-19 management workflows. These could include pre-screening diagnosis recommendations (where test kits are in limited supply), links to psycho-social support, digital registration for messaging campaigns, and diagnosis or self-isolation follow-up. Special measures will also be taken to target groups who are marginalized and may not have access to regular channels of media communication. Particular attention will be given to reaching women who mostly shoulder the burden of care for children and the elderly, the elderly living on their own, people with disabilities, people who do not speak Sinhala, or people in remote locations without access to mainstream media.

Social and Financial Support to Households. Efforts will be made to address some of the negative externalities expected in the event of a widespread COVID-19 outbreak, particularly among the elderly who are at the greatest risk of the disease, the people with special needs who are institutionalized, orphans in various types of homes, the poor who are at risk of loss of income, and women who are at risk of increased gender based violence. Investments will focus on (a) provision of PPE, cleaning products, and logistical

support through easy access to testing and essential medicines for elder care homes, homes for the people with special needs, orphanages; (b) preparation of guidelines and training to the social welfare workers and other field level staff to ensure proper isolation, treatment and transportation of suspected cases and avoid spread within homes; (c) protocols and resources for safe transportation and burial/cremation of deceased, particularly the poor households; (d) provision of psycho-social support and community-level outreach to women and children who are experiencing domestic violence when confined to their houses; (e) communication on GBV and child protection resources available, disseminated through public health facilities and social welfare workers; (f) counselling to households suffering loss of a family member, especially given normal mourning processes may not be possible; and (g) under additional finance (AF) elderly, persons with disabilities and CKD patients from low-income households will be supported social cash transfers through existing programs in response to the current COVID-19 crisis. The support will include those who have thus far been on the wait list and new eligible applicants who have applied for benefit during this pandemic. It will also support temporary vertical expansion i.e. increase in benefit amount for these programs.

b. Subcomponent 1.2: Social and Financial Support to Vulnerable Households.

This subcomponent will finance the scale-up of social cash transfers through existing well-established delivery mechanisms for the elderly, persons with disabilities and chronic diseases, such as CKD, from low-income households in response to the current COVID-19 crisis. It will primarily include those who have thus far been on the waiting list and new eligible applicants who have applied for benefit during this pandemic. Further, this subcomponent will also support temporary vertical expansion, that is, increase in benefit amount for the senior citizens' assistance scheme.

The existing senior citizens' assistance scheme, also known as elderly allowance, currently covers over 417,067 beneficiaries. In response to COVID-19, an additional 212,721 beneficiaries who were on the waiting list and newly identified beneficiaries were further included for assistance under this scheme. An increase in benefit amount from LKR 2,000 to LKR 5,000 per month was also made. Similarly, the existing program for persons with disabilities and the allowance for chronic disease patients, such as CKD patients, were also expanded to include those on the waiting list as well as newly identified for assistance. The allowance for persons with disabilities which covered 72,000 beneficiaries has been expanded to include 51,641 new applicants and those from the waiting list. Similarly, the allowance for chronic disease patients, such as CKD patients, has been expanded from 25,320 to add another 18,971 beneficiaries. The benefit amount for these two programs, however, remains unchanged at LKR 5,000 per month. In all, this subcomponent will support benefits for approximately 700,000 beneficiaries, which may change during the project period. Being an emergency operation, the project leverages existing mechanisms available for cash transfers, and therefore focuses on high-risk beneficiaries through these three programs.

Streamlined systems of beneficiary selection exist for these programs. Selection of beneficiaries is through a community-based targeting mechanism with income means testing. Village-level functionaries and community groups play a critical role in identifying and verifying applicants and in the selection of beneficiaries. Further, during this pandemic, village-level pandemic response committees have been established at the local government level (4,917 wards) or *Grama Niladari* (14,022) level. This committee comprises representatives from the local authority, *Grama Niladari* (Village Officer), Family Health Service Officer, Economic Development Officer, *Samurdhi* Development Officer, and Agriculture Research Officer. The village committees accept fresh applications and also review the waiting list already available with the Divisional Secretariat to support the scaled-up rollout of the cash transfers. Grievances are also routed to the committee and/or Divisional Secretary for resolution. Awareness about the program

as part of the overall COVID-19 communication strategy (under Subcomponent 1.1) will be undertaken to involve community level citizens' and elders' groups to reduce the risks of exclusion and enhance access to the program. The Social Safety Nets Project will also help the Government to improve beneficiary registration, enrollment, and targeting processes.

c. Sub-component 1.3: Acquisition, planning, management and deployment of COVID-19 vaccines and its related activities and infrastructure:

This sub-component will finance the purchase of vaccines and in implementing relevant aspects of safe and effective vaccine deployment measures as outlined in the National Deployment and Vaccination Plan (NDVP) for COVID-19. To achieve high coverage in a short period of time, the vaccination campaign will be carried out through a targeted strategy and deployed via a network of estimated 4000 clinics/vaccination centers spread across the country. These centers will be housed in existing health care facilities within Sri Lanka's extensive network of primary, secondary, and tertiary health institutions. While the MoH is responsible for implementing the vaccination program, nine provincial departments of health services from the State Ministry of Provincial Councils and Local Government Affairs (SMoPCLGA) are responsible for the implementation of the vaccination program at the provincial and district levels.

The first vaccine AF will include the purchase of COVID-19 vaccines that meet World Bank's vaccine approval criteria, equipping the selected vaccine deployment centers with the vaccines, expansion of necessary vaccine storage equipment/capacity (cold chain equipment), PPEs, basic health care waste management equipment (sharps bins, syringes, vials, reagents etc.) and any other medical and non-medical consumables, goods, services and operating costs related to vaccination. Further the AF will support incremental service delivery costs that supports the benefits of clinical and non-clinical staff implementing sub component 1.3 of the project consisting of provision of hazard pay and (their overtime allowances) and risk communication and advocacy, related analytical work, training of health personnel, supervisory activities, transport, medical waste management, registration systems and supporting of existing management information systems.

The second vaccine AF will be used to help procure the required 14 million doses of the Pfizer vaccine and to support costs associated with vaccine deployment efforts. It will support the scaling up of the vaccination drive and to enable the country to meet its target of fully vaccinating 60 percent of the population by the end of December 2021. Specifically, the second vaccine AF will support i) the direct bilateral purchase of approved vaccines; and (ii) freight and vaccine indemnification costs and other associated vaccination costs for a total of US\$100 million.

Component 2: Strengthening National and Sub-national Institutions for Prevention and Preparedness (Indicative Amount: Total US\$ 35 million)

This component will support strengthening the capacity of national and sub-national institutions to respond to the ongoing COVID-19 outbreak and any public health emergencies that may occur in the future. In particular, it will support:

Strengthening the National Institute of Infectious Diseases (NIID). To respond to the obvious need to strengthen the apex institute for infectious disease in the country, which is struggling due to its limited capacity, support will be provided to expand isolation units within the institute. In addition, to build its capacities for future responsiveness, a new isolation center will be constructed within the premises of the NIID, as the current facilities cannot accommodate modern technological facilities including negative

pressure rooms, ICUs and separate waste disposal and drainage systems. This is aligned with the National Emergency Response Plan for COVID 19.

The establishment of the Regional Quarantine and Testing Centers (QTCs). Regional quarantine centers equipped with testing facilities and arrangements will be established to enable effective pandemic response. This will supplement the capacity of the singular NIID.

The establishment of Bio-Safety Level (BSL) 3 Laboratory Facilities at the National Medical Research Institute (MRI). As on date, the country does not have any BSL3 laboratory, which is important considering responsiveness to any future outbreaks. The establishment of a BSL3 laboratory at the MRI, the premier center in the country for bio-medical and applied health research, which is a national referral laboratory for diversified areas in the fields of virology, bacteriology, parasitology, etc. will therefore be supported. This will improve the capacity to run investigations for highly contagious diseases on high risk patients which results in high quality of care, while ensuring safety of the laboratory staff who are handling infectious samples at NIID.

Strengthening Laboratory Facilities and Information Systems. Laboratory facilities will be strengthened by providing the necessary testing kits, PPEs, equipment for safe transport of biological samples, training and re-orientation of lab technicians on standardized sample collection, channeling and transportation for infectious diseases, and decontamination practices. Guidelines for engaging a network of private hospitals and laboratories for supporting care and testing will also be developed to support existing facilities and labs deal with surges in samples and patients.

Following the immediate response, focus will be placed on improving the quality, efficiency and bio-safety systems of laboratories in secondary and tertiary care hospitals, moving toward a national process of accreditation of laboratories, which will contribute to strengthening health systems in the country. Investments will also be made towards strengthening both the surveillance and laboratory information systems by facilitating networking across public health facilities, as part of GoSLs vision of having an interoperable information system for the health sector, to enhance efficiency and preparedness.

Component 3: Strengthening Multi-sectoral, National institutions and Platforms for One Health (Indicative Amount: Total US\$ 8.6 million)

About 75 percent of new infectious diseases begin with human-to-animal contact, including HIV/AIDS, Ebola, and SARS. Thus, for long term gains, adopting a one-health approach and strengthening emergency response systems will be important. This includes a convergent approach that covers food safety, the control of zoonoses (diseases that can spread between animals and humans) and combatting antibiotic resistance. Investments would be made in: (i) conducting a needs assessment of national protocols for detection, surveillance, and response systems for animal and human health infections; (ii) establishing a mechanism for detection of priority existing and emerging zoonoses; and (iii) conducting awareness on anti-microbial resistance among human health, agricultural, and veterinary and enforcement of related legislations. Activities under this component would be implemented in collaboration with the related Ministries and stakeholders

Component 4: Implementation Management and Monitoring and Evaluation (Indicative Amount: Total US\$ 5 million)

Support for the strengthening of public structures for the coordination and management of the project would be provided, including central and provincial arrangements for coordination of activities, financial

management and procurement. This component would also support monitoring and evaluation of prevention and preparedness, building capacity for clinical and public health research, and joint-learning on pandemic preparedness across and within countries. Collection use and processing (including transfers to third parties) of any personal data collected under this Project will be done in accordance with best global practice ensuring legitimate, appropriate and proportionate treatment of such data. As may be needed, this component will also support third-party monitoring of progress.

Component 5: Contingent Emergency Response Component (CERC) (US\$0 million)

In the event of an Eligible Crisis or Emergency, the project will contribute to providing immediate and effective response to said crisis or emergency. The allocation to this component is to minimize time spent on a reallocation of funds from programmed activities. The unused amount can be reallocated to other components if the CERC component is not triggered a year prior to project closing.

1.2.2 Project Beneficiaries

The project beneficiaries will be the entire population in Sri Lanka given the nature of the disease. Focus will however be on infected people, at-risk populations, medical and emergency personnel as well as service providers at medical and testing facilities (both public and private), and public and animal health agencies engaged in the response. Staff of key technical departments, particularly the MoH, SMOPLGA and the Ministry of Women, Child Affairs and Social Security (MWCASS) and its field level staff, administrative and supportive staff of eldercare, people with special needs and orphanages will also benefit from the project as their capabilities increase through the strengthened institutional capacity as well as through enhanced personal protection through vaccination.

1.3 OBJECTIVES OF THE ESMF

Projects and programs prepared and managed by World Bank's Investment Policy Financing (IPF) support need to comply with the Environmental and Social Standards (ESSs) of the World Bank's Environmental and Social Framework (ESF). Therefore, all the investment packages eligible for funding under the proposed Sri Lanka COVID-19 Emergency Response and Health Systems project (P173867) is required to satisfy the World Bank's ESF in addition to conformity with environmental and social legislation of the Government of Sri Lanka (GOSL).

Given the emergency response nature of the project, details of all the specific sub-projects are not available upstream. What is known is that the Project will potentially fund expansion of physical infrastructure in the secondary and tertiary hospitals, construction of isolation wards and establishment of laboratory facilities with required equipment. As and when details of these specific investments are identified, information necessary to carry out site specific social and environmental assessments and prepare appropriate mitigation measures to address social and environmental impacts, would be required. Thus, while site-specific Environmental and Social Impact Assessments (ESIA) cannot be conducted at this stage what is possible is to carry out an identification of generic risks and impacts that are typically associated with this type of investments focused on: (i) supporting short term urgent facilities to address the emergency needs; and (ii) fulfill the long-term requirements to strengthen the health sector infrastructure needs to handle similar unpredictable emergency situations in the future.

Therefore, the purpose of this Environmental and Social Management Framework (ESMF) is to outline a framework for environmental and social management for the Project, giving details of potential environmental and social issues, and guidelines on assessing environmental and social sensitivity of sub-projects through appropriate environmental and social screening, followed by an environmental and social impact analysis, if required. The ESMF will also serve as the basis in the preparation of recommended sub-project specific instruments such as Environmental and Social Impact Assessments and/or Environmental and Social Management Plans (ESMPs) etc. As stated earlier, the ESMF is being submitted in lieu of a project ESIA and has formed the basis for appraising the environmental and social aspects of the project.

Therefore, the objectives of this Environmental and Social Management Framework (ESMF) can be summarized as:

- a. To establish clear procedures and methodologies for environmental planning, assessment, review, approval and monitoring of subprojects to be financed under the Project
 - b. To specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental concerns related to subprojects
 - c. To determine training, capacity building and technical assistance needed to successfully implement the provisions of the ESMF.
- To provide practical resources for implementing the ESMF.

The environment and social management framework (ESMF) was first disclosed on the MoH's website (http://www.health.gov.lk/moh_final/english/) on May 9, 2020 in compliance with the financing agreement for the Sri Lanka COVID-19 Emergency Response and Health Systems Preparedness Project. Subsequently, it was re-disclosed on January 15, 2021 reflecting changes from the first additional financing for cash and in-kind transfers. An update to the ESMF was again carried out in April 2021 to reflect changes from the additional financing of the project for vaccine deployment. This update carried out in September 2021 reflects changes from further additional financing to scale up vaccine procurement and deployment.

2. ASSESSMENT OF RELEVANT POLICY, LEGAL AND REGULATORY FRAMEWORK OF SRI LANKA

2.1 EXISTING HEALTH CARE WASTE MANAGEMENT FRAMEWORK IN SRI LANKA

2.1.1 Draft National Policy on Healthcare Waste Management

In 2001, the Government of Sri Lanka drafted a comprehensive national policy on health care waste management. It has three main sections, covering:

(i) General considerations on Healthcare Waste Management (HCWM) and the institutional mechanism for policy implementation that should be set up at national level. (ii) Provisions for the safe management of HCW in medical Institutions, including regulations and HCWM plans. (iii) Provisions for the implementation of and the monitoring of HCWM plans at national and provincial levels including legislation, provision of human and financial resources, training and awareness and participation of private sector.

Some salient features of the draft policy are highlighted below.

(i) Healthcare waste generated by the medical institutions of the public and private sector must be safely handled and disposed of. HCWM as an integral part of hospital hygiene and infection control, hence each healthcare facility (HCF) is legally responsible for the proper management of waste that it generates until its final disposal.

(ii) Major hospitals must prepare specific HCWM plans outlining needs, objectives, and strategies, procedures for approved management and disposal of HCW and timeframe for implementation. The Provincial Department of Health Services (PDHS) must set up annual Provincial and District HCWM plans presenting the strategy for HCWM that should be developed at the regional level. The provincial/regional plan shall be a compilation of individual HCWM plans of each HCF the province is responsible for. All plans need to be validated and supported by the Central or Provincial Health Services before implementation.

(iii) Specific budget lines need to be developed relating to hospital hygiene and HCW management in the National Accountancy of the Health System to ensure sufficient human and financial resources are allocated to implement the HCWM plans in medical institutions.

(iv) Policy implementation needs to be monitored based on specific objectives defined in the National Action Plan (the plan developed to implement the policy country wide - see section below) and that institutionally, the National Steering Committee on Clinical Waste Management is responsible for the overall monitoring and evaluation and the PDHS for the implementation of monitoring procedures in HCFs within their area of jurisdiction.

(v) Other key aspects highlighted relate to approved HCWM practices, equipment for treatment and disposal, training and awareness, involvement of civil society and private sector participation.

The institutional mechanism for implementing the national policy is envisaged under three levels of management:

(i) At the central level, coordination and development of strategies and mechanisms to implement policy commitments, in accordance with national requirements, has been vested with the National Committee on Clinical Waste Management (NCCWM). In addition, development of training and capacity building packages, training implementation supervision, setting up of HCW monitoring protocols, overall monitoring and evaluation has been assigned to the NCCWM. The central health services are responsible for technically backstopping HCFs under its management purview.

(ii) At the provincial level, implementation of the policy has been vested with the Provincial Councils. The PDHS is responsible for setting up provincial HCWM plans, synthesized from individual hospital HCWM plans coming under its area of jurisdiction, development of financial resources and for the implementation of HCW monitoring/auditing procedures.

(iii) At the local level, setting up of HCWM plans that outline needs, objectives, strategies, procedures and timeframes for medical institutions has been vested with the hospital management.

The national policy on HCWM to this date remains a draft as all attempts for its formal adoption in the past has not been successful.

2.1.2 Draft National Guidelines on Health Care Waste Management

In 2001, the government drafted national guidelines for healthcare waste management with the aim of (i) providing a better understanding of the fundamentals of HCWM planning and (ii) directing HCFs in setting necessary procedures and standards to comply with policy and legislative requirements. These have been drafted in a form that provides all fundamental elements that should be integrated into future legislation specific to HCW. Although guidelines were reviewed by the NCCWM as well as the Ministry of Health it did not receive formal endorsement by the government.

The draft national guidelines contain both practical and conceptual information on HCWM covering four main sections:

(i) Definition and categorization of HCW including potential harmful effects that can result from its improper management. (ii) Procedures for segregation, packaging, labelling, collection, storage, transportation and disposal (including selection of appropriate treatment and disposal technologies for HCW) that should be applied and followed by all HCFs in the country. (iii) Instructions for the implementation of health care waste management plans including detail description of duties and responsibilities of health care provider at various levels. (iv) Instruction for personnel of Central and Provincial Health Services who oversee HCWM to ensure smooth implementation of the guidelines and to set up regular monitoring mechanisms.

In 2007, concise guidelines for HCWM were prepared under the Hospital Efficiency and Quality component of the Sri Lanka Health Sector Development Project based on the detailed draft guidelines prepared in 2001. The concise guidelines which mainly contain sections in waste categorization and health care waste management procedures have been formally adopted and incorporated into the Handbook of Infection Control.

2.1.3 National Code of Hygiene

Management of HCW is an integral part of hospital hygiene and infection control that must be reinforced with internal rules. In 2008, the government developed a comprehensive Code of Hygiene that complemented the existing Infection Control Handbook. The national code of hygiene contains recommended HCWM procedures and is seen as part of an overall set of actions to control the hygiene conditions within the hospital. It sets out duties and responsibilities of medical and non-medical staff regarding hygiene procedures to be applied, recommended practices to maintain high level of hygiene and ongoing management and managerial activities to be carried out in the hospital. The code of hygiene must be implemented along with the HCWM guidelines.

2.1.4 National Color Code

In 2006, the MOH developed a national color code for implementing a uniform system for separating HCW streams based on the type of waste, treatment and disposal methods. The code recommends technical specifications for bags and bins to be used for different waste types. The national color code identifies 7 specific categories.

Table 1: National Color Code for segregation of HCW

Color	Category	Content
Yellow	Infectious	Infectious Cultures or stocks from microbiology, tissues from surgeries/autopsies, material or equipment in contact with blood or body fluids soiled linen, dialysis equipment such as tubing and filters.
Yellow with red stripes	Sharp waste	Sharps, needles and IV sets contaminated with body fluids
Black	General waste	General or municipal waste that is uncontaminated
Green	Biodegradable waste	Garden, kitchen and food waste
Red	Glass Waste	Uncontaminated drink bottles, water bottles
Blue	Paper Waste	Paper, cardboard and office stationary
Orange	Plastic Waste	Uncontaminated plastic medicine bottles, saline bottles without IV sets, plastic bags

2.1.5 Infection control Manual

In 2005, the College of Microbiologists published the “Hospital Infection Control Manual” as a resource to provide basic information and guidance on infection control in a way that is practical and feasible in resource limited settings such as Sri Lanka. The Manual also provides a basis for establishing and implementing necessary policies and procedures with regard to infection control in health care facilities.

In Sri Lanka most of the major hospitals have an Infection Prevention and Control (IPC) program with a dedicated team including trained nurses. The training of nurses on IPC is carried out in Colombo annually by the Ministry of Health.

However, in most Sri Lankan hospitals, not even the minimum ratio of one infection preventionist per 250 beds is maintained. IPC units in hospitals are headed by the Consultant Microbiologists, when they are available. All major (Provincial and Teaching) hospitals of the country have full time consultant microbiologists trained locally and overseas and Board Certified as Specialists in Medical Microbiology by the Board of Study in Medical Microbiology of the Post Graduate Institute of Medicine, University of Colombo, Sri Lanka. These Consultant Microbiologists have developed local IPC guidelines at facility level based on international guidelines and the Infection Control Manual of the Sri Lanka College of Microbiologists.

The National Health Strategic Master Plan 2016 - 2025 (Curative Services) Ministry of Health of Sri Lanka has identified IPC in healthcare settings and combating antimicrobial resistance as two national programs to be implemented during the period 2016-2025. Outcome indicators and a monitoring and evaluation plan have been identified in both these programs.¹

In response to the COVID pandemic, the MoH has issued several guidelines via the Health Publication Bureau for additional infection control, based on instructions/guidelines/advice issued by the WHO. These will take precedence over general infection control measures at all COVID treatment hospitals given that COVID-19 is a highly infectious disease.

2.1.6 COVID-19 Specific Guidelines Issued by the Ministry of Health

Several guidelines have been issued by the MoH and the Health Promotion bureau on Health and Safety in for dealing with the COVID crisis. These situation specific guidelines and are listed in Annex 2.

2.1.7 Existing organizational structure for National Immunization Programme

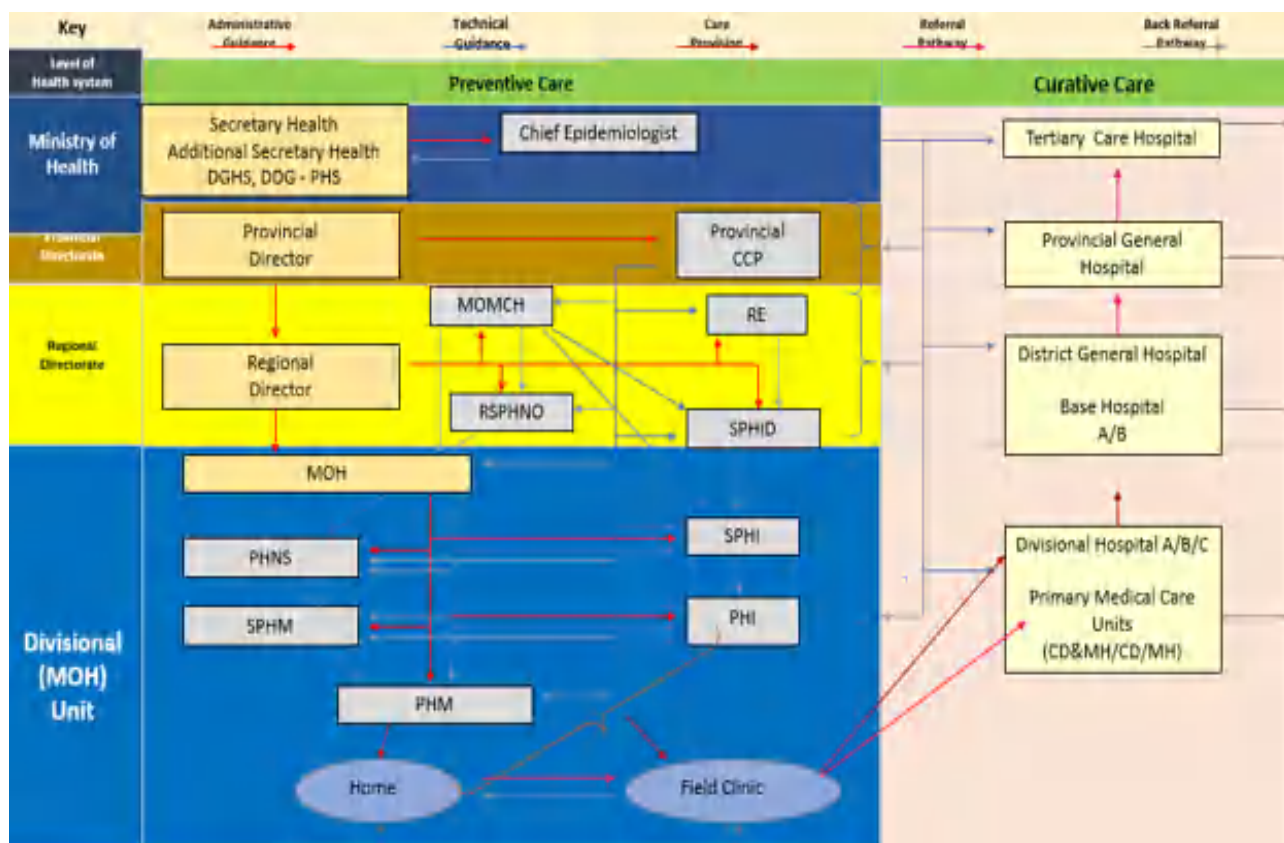
Vaccination is provided for the most part by the public health system through its preventive and curative health systems. The main service provision of the Expanded Programme on Immunization (EPI) is through the preventive health sector of Medical Officer of Health (MOH) staff, even though opportunity to receive vaccines are provided through vaccination clinics conducted at curative care institutions. The overall responsibility of the vaccination programme is with the Epidemiology Unit, Ministry of Health.

The implementation responsibility to vaccinate priority groups will be decided by the MOH and staff while technical guidance, supervision monitoring and evaluation at district level is done by the Regional Epidemiologist in liaison with the Epidemiology Unit. Consultant Community Physicians at provincial and district level provide overall coordination and expert guidance on the programme functioning. Provincial Directors and Regional Directors of Health Services provide overall administrative, financial and managerial support for district and provincial level implementation and work for the sustainability of the vaccination programme.

¹ Jayatilake K., Infection prevention and control in Sri Lankan hospitals in relation to WHO Guidelines, Sri Lankan Journal of Infectious Diseases 2017 Vol.7 (1):2-9

Hospital Immunization clinics are conducted at level above the Base hospitals by the hospital staff including Consultant Pediatricians, Medical Officers and Nursing Officers. These clinics provide services at field level as referral clinics, as necessary. District and smaller hospitals conduct immunization clinics as one of the MOH office clinics together with the MOH office staff. The activities across all levels are well coordinated resulting in high vaccination coverage. Private health sector also provides a proportion of vaccination services (approximately 5%) adhering to the National Immunization Guidelines.

Figure 1: Overview of the Organizational structure : Existing Immunization service delivery



For the last decade, Sri Lanka has consistently reported high vaccination coverage (>95%) for all antigens in the EPI schedule.

Vaccination programme through the life cycle approach is a key strategy for communicable disease control and prevention, and not limited to childhood vaccination. Universal immunization has been one of the key interventions that has helped the country control and eliminate many vaccine-preventable diseases.

The last case of Smallpox in Sri Lanka was in 1972 while global eradication of Smallpox was declared in 1979. The last case of Poliomyelitis in Sri Lanka was in 1993 while Regional polio free status was declared in 2014. The last case of Neonatal tetanus was in 2009 while Regional elimination was declared in 2016. Endogenous measles was eliminated in 2019 and endogenous rubella was eliminated in 2020. The last case of Diphtheria was in 1991 and remains almost eliminated.

The robust vaccination infrastructure in the country has supported and enabled successful implementation and supportive supervision system across national, provincial, district and community level.

The existing system and network of national immunization programme provides a functional platform for successfully conducting vaccination campaigns, National Immunization Days (NID), subnational NIDs, mopping up campaigns for polio and in outbreak control campaigns such as H1N1 pandemic situation in 2009, and measles outbreak situation in 2015.

For COVID 19 immunization drive the Government will depend on this organizational structure in collaboration with the local councils given the large scale and emergency nature of the campaign. In addition to the immunization clinics, the MoH will use mobile pop up clinics in each area within MoH office premises, churches, temples and community centers to deploy the vaccine.

2.2 ENVIRONMENTAL LEGISLATION

2.2.1 The National Environmental Act

The requirement for environmental assessment and environmental pollution control in Sri Lanka is established by the National Environmental Act No 47 of 1980 and its amendments (No 56 1988 and No 53 of 2000). The three main regulatory tools implemented under the NEA are Environmental Impact Assessment (EIA)/Initial Environmental Examination (IEE), Environment Protection License (EPL) and Schedule Waste Management License supported by standards for discharge and waste disposal guidelines.

The procedures for EIA/IEE are defined in the EIA regulations gazette No 772/22 (1993). The regulations prescribe the activities for which EIA/IEE is mandatorily required in three separate schedules. The need for an environmental assessment and the level of analysis required (EIA or IEE) for each development activity is screened by the CEA based on the submission of a Basic Information Questionnaire by the developer. There are two possible screening outcomes

(i) Exclusion from EIA/IEE – the activity does not fall under the prescribed category or located in a sensitive area as defined in the regulations.

(ii) EIA/IEE required – the activity falls under the prescribed category, has potentially serious environmental impacts and/or is in a sensitive area. With a positive screening decision, the CEA appoints a scoping committee to decide on the level of analysis and prepare the TOR or if the project falls within the jurisdiction of government authority which is an appointed project approving authority to administer the EIA process, the CEA will hand over the process to the said authority.

The second regulatory tool under the National Environmental Act is the Environmental Protection License (EPL).

The EPL procedure has been introduced to prevent or minimize the release of discharges and emissions into the environment from industrial activities in compliance with national discharge and emission standards, to provide guidance on pollution control for polluting processes and to encourage the use of pollution abatement technology. The EPL regulations define the prescribed activities for which a license is required and procedures for obtaining one. Since 2008, the NEA requires all medical institutions to obtain a valid Environmental Protection License (EPL).

(i) Part II of the National Environmental (Protection & Quality) regulation No. 01 of 2008 includes “Health care service centers generating infectious wastes, including medical laboratories and research centers” as a prescribed activity that requires a license.

(ii) Schedule VIII lists Healthcare waste as a scheduled waste from specific sources that no person shall generate, collect, transport, store, recover, recycle or dispose except under the license issued by the Authority and in accordance with standards and other criteria as may be specified by the Authority.

Accordingly, every HCF is legally responsible for the proper management of health care waste from the point of generation until its final disposal to ensure minimum environmental and public health impacts. However, the NEA does not contain any definition of HCW, or characterization of the type and degree of hazards associated with different medical wastes. Nor does it carry any guidance on treatment and disposal technologies that might be considered acceptable in Sri Lanka.

The third regulatory tool under the NEA deals with the disposal of scheduled waste as defined through the gazette notification No 1534/18 of 2008. It deals with waste from specific and nonspecific sources. The notification has three parts and eight schedules of which Part I deals with the issue of environmental protection license for emission/disposal of waste, part II deals with the issue of license for the management of scheduled waste (Hazardous Waste) and part III on general matters including definitions and the effectiveness and validity of the license issued under National Environment (protection and quality) regulation No 1 of 1990 published in extraordinary gazette No 595/16 of February 1990. The eight schedules include the tolerance limits, applications, formats for reporting, categorization of nonspecific and specific waste etc.

There are several other key national legislations for environmental management and protection. The Flora and Fauna Protection Ordinance and the Forest Ordinance does not permit any construction activities in protected areas managed by the Department of Wildlife Conservation and Forest Department, respectively. If any development is bound to have an impact on protected areas clearance from the two departments, as the case is, must be obtained.

2.2.2 The Antiquities Ordinance No 9 of 1940

This prohibits any activity within declared archaeological reserves. If a certain development activity has the potential to cause structural or non-structural damage to an archaeological resource clearance from with the Department of Archaeology must be obtained and if required, the Director of the Department could request for an Archaeological Impact Assessment before clearance is granted.

2.2.3 The Agrarian Development Act No 46 of 2000

This act prohibits any filling of paddy land for development without the written permission of the Commissioner General of Agrarian Services.

2.2.4 Disaster Management Act

Under the Disaster Management Act construction in identified land slide hazard areas will require approval from the National Building Research Organization.

2.2.5 The Urban Development Authority Act No. 41 of 1978 and the Sri Lanka Land Reclamation & Development Corporation Act No. 15 of 1968

These acts require clearance to be sought when carrying out development work in areas that are declared under these acts. 48. In addition to the above, approval from local authority is required for all new constructions.

Table 2: National level clearances that are applicable to the project

Activity	Relevant legislation	Statutory requirement	Authorizing body
Discharging of Health Care Waste	NEA	EPL/SWL	CEA
Constructions in the disaster-prone areas	DMA	Approval	NBRO

NEA= National Environment Act; DMA= Disaster Management Act; EPL=Environmental Protection License; CEA= Central Environment Agency; NBRO = National Building Research Organization; SWL=Schedule Waste License

Apart from the above, none of the other clearances are likely to be required as the infrastructure development proposed under the project will be limited to expansion/upgrading of existing building footprint/facilities or the addition of new wards dedicated for infectious diseases, on land owned by the MoH.

2.3 SOCIAL POLICIES AND REGULATIONS

2.3.1 Key legislature and Regulations Related to Land

The current Sri Lankan laws governing matters relating to land, such as land acquisition, recovery of state lands, claiming rights of acquisitive prescription, declaration of reservations, compensation for property losses, and compensation for improvements in Sri Lanka are contained in a number of legislative enactments, including:

Land Acquisition Act No. 9 of 1950 (LAA), which guarantees that no person is deprived of land except under the provisions of the LAA, and entitles APs to compensation for the loss of lands, loss of fixed assets, and loss of income.

Land Acquisition Regulations 2008 (LAR 2008), which includes the provision of statutory payments of compensation for affected land at market rates, reconstruction cost of structure without depreciation, and valuation for whole plot of land for determining proportional unit cost for the affected land parcel, business losses, and relocation assistance.

Land Acquisition Regulations 2013 (LAR 2013) - LAR 2013 is not a replacement of LAR 2008. While LAR 2008 covers general provisions, LAR 2013 covers for a compensation package for ‘specified projects’ that goes beyond what is prescribed in the LAR 2008, including *ex gratia* and non-statutory payments of compensation through the Land Acquisition and Resettlement Committee (LARC) and Super LARC systems for ‘specified projects’ by the Ministry of Lands.

National Involuntary Resettlement Policy 2001 (NIRP), includes several principles/features that brings the acquisition, resettlement, and rehabilitation procedures of the GoSL closer to the World Bank's policies. Some of these include: avoiding involuntary resettlement to the extent possible; guaranteeing adequate compensation, based on replacement value; and inclusion of APs in decision making relating to relocation and resettlement processes.

In addition to the above laws and policies, there are several other legal instruments in Sri Lanka that address issues of land acquisition, these include: Crown Land Ordinance of 1947, State Lands Act of 1949, State Lands (Recovery of Possession) Act of 1979, and Land Development Ordinance of 1935. Besides these laws relating directly to private land acquisition and the recovery of state and other public land, there are also policies and regulations that relate to public infrastructure and services like the Urban Development Authority Law of 1978, Road Development Authority Act of 1981, Municipal Council Ordinance of 1947, and the Sri Lanka Land Reclamation and Development Corporation Act of 1968.

2.3.2 Legislature and laws relating to women and vulnerable groups

Constitution of Sri Lanka: Chapter 3 of the Constitution of Sri Lanka enshrines Fundamental Rights, including the right to equality and the right to be free from discrimination on the grounds of race, religion, language, caste, sex, political opinion, and place of birth. Further, the Directive Principles of State Policy and Fundamental Duties mentions the realization by all citizens of an adequate standard of living for themselves and their families, including adequate food, clothing and housing, continuous improvement of living conditions and the full enjoyment of leisure and social and cultural opportunities.

Women's Charter of Sri Lanka: The state policy on women in Sri Lanka is articulated in the Sri Lanka Women's Charter of 1993, which is based on United Nation Convention on the Elimination of all forms of Discrimination against Women. Seven areas of concern, addressed in the Charter include women's: civil and political rights, right to education and training, right to economic activity and benefits, right to healthcare and nutrition, rights within the family, right to protection from social discrimination, and right to protection from gender-based violence.

Policies and regulations promoting Gender equality in Sri Lanka: Since 2015, the Government of Sri Lanka adopted the following new policies and regulations aimed at accelerating the elimination of discrimination against women and gender equality promotion:

- The Assistance to and Protection of Victims of Crime and Witness Act No. 04 of 2015, which created the National Authority for the Protection of Victims of Crimes and Witnesses and extended protection mechanisms for survivors of gender-based violence (GBV).
- In 2016, the Amendment of the Local Government Elections Act to include a 25% quota for women in Local Government bodies substantially increased female representation across all local government bodies with almost all recording 25% female representation.
- amendments in the Maternity Benefits Ordinance and the Shop and Office Employees (Regulation of Employment and Remuneration) Act increasing all women's entitlement to 84 days (12 weeks) of maternity leave irrespective of the number of children they have and the act they fall under.
- In 2017, the National Human Action Plan (2017-2021) was finalized with a separate chapter on the protection and promotion of women's rights.
- In 2016, the National Strategic Plan to Monitor and Combat Human Trafficking, and Policy Framework and National Plan of Action to address Sexual and GBV (2016-2020), were adopted.

Support for the poor and vulnerable: Sri Lanka has a comprehensive social security system consisting of old age pensions, lump-sum payments at retirement for public officers and workers in the formal private sector and their dependents, and voluntary schemes for workers in the informal economy. In addition, there are schemes which cover disability, health care, and social safety nets targeting the poor. Among these, the Samurdhi programme is the main social assistance programme in Sri Lanka, which consists of a relief programme and an empowerment programme. The relief programme relates to the cash transfers, a social security fund, and a nutrition programme. The empowerment programme consists of five components: rural infrastructure, livelihood, social development, Samurdhi housing, and microfinance through Samurdhi Bank societies. The old age system is governed by the Employees' Provident Fund Act No. 15 of 1958, and amendments, and the Employees' Trust Fund Act No. 46 of 1980, and amendments. Sickness and maternity benefits are governed by the Maternity Benefits Ordinance No. 32 of 1941 and the Shop and Office Employees Act 1954, respectively. Work injury benefits are governed by the Workmen's Compensation Ordinance No. 19 of 1934, and amendments. Family benefits for low income families are governed by the Divineguma Act No. 1 of 2013.

National Charter for Senior Citizens and National Policy for Senior Citizens Sri Lanka (2006): This Charter sets out the rights and responsibilities of as well as towards the Senior Citizens of Sri Lanka. It emphasizes the need to provide opportunities to willing and capable Senior Citizens to participate and contribute to on-going activities. The Charter contains the essential norms against which the quality of care, health and welfare programs for senior citizens, care givers or health professionals need to be judged.

Protection of the Rights of the Elders Act No. 9 of 2000 & Act No.5 of 2011 - These acts has enabled the establishment of a Council for Elders: Comprises 15 members representing the Ministries of Social Services Health and Finance, as well as elders and voluntary organizations that are engaged in providing services for elders and professionals; its principal function being the promotion and protection of the welfare and the rights of elders, and assisting elders to live with self-respect, independence and dignity. The act also enabled the establishment of National Secretariat for Elders as the implementing arm of the National Council. It is headed by a Director and assisted by 95 Elders Rights Promotion Assistants who are attached to Divisional Secretariats. The Secretariats implement the programs directly, and where necessary, also allocates funds to Provincial authorities and Divisional Secretariats for this purpose.

Chapter III, Article 12, Paragraph 4 of the Constitution of Sri Lanka permits legislation and executive action that creates advantages for disabled persons. **The Protection of the Rights of Persons with Disabilities Act no 28 (1996)** seeks to promote, advance and protect the rights of persons with disabilities. Specifically, the Act provides protection for people with disabilities against discrimination with regards to employment, education and access to the built environment. This also gives a legal framework for activities of the National Council for Persons who have disabilities. **The Ranaviru Seva Act** was enacted by the Parliament of Sri Lanka by which Ranaviru Seva Authority was set up to provide for the after care and rehabilitation of members of armed forces and police who are disabled. **The Visually Handicapped Trust Fund Act** aims at providing educational and vocational training opportunities for poverty reduction, provide financial assistance and guidance for self-employment of the visually impaired people. Sri Lanka also ratified by the Convention on the Rights of Persons with Disabilities on 8 February 2016.

National Child Protection Policy (2019): The objective of the policy is to create a protective and caring environment, where girls and boys are free from violence, exploitation, and unnecessary separation from family. Specifically, the policy highlights the need to protect children from violence, exploitation and neglect in disaster situations, conflicts and emergencies and stresses the importance of coordinating all sectors including with health institutions, the police, specifically the Women and Children's (W&C) Bureau

and W&C police units, the judiciary, and relevant NGOs providing services in this field. The policy also encourage the participation of children in communication strategies and to develop key messages focused on preventing child abuse and encouraging reporting of incidents that occur. Promote advocacy as a continuous process to help mobilize resources and galvanize political and social leadership to prevent child abuse, exploitation, violence and neglect.

2.3.3 Labor laws and Regulations

The legislative framework relating to industrial, employment, and labour relations is governed by a number of statutes.

- Terms and conditions of employment are governed by the Wages Board Ordinance No. 27 of 1941, the Shop and Office Employees' Act No. 19 of 1954, and the Employment of Trainees (Private Sector) Act No. 8 of 1978.
- Labour/industrial relations are governed by the Trade Unions Ordinance No. 14 of 1935, the Industrial Dispute Act No. 43 of 1950, the Termination of Employment of Workmen (Special Provision) Act No. 45 of 1971, and the Employees' Councils Act No. 32 of 1979.
- Well-being of employees is governed by the Employment of Women, Young Persons, and Children Act No. 47 of 1956, the Maternity Benefits Ordinance No. 32 of 1939, and the Employment of Females in Mines Ordinance No. 13 of 1937.
- Occupational safety and health is governed by the Factories Ordinance No. 45 of 1942 and the Workmen's Compensation Ordinance No. 19 of 1934.

In addition, Sri Lanka has ratified 41 of the International Labour Organization Conventions, including the eight core conventions on labour standards, including the including the right to collective bargaining and freedom of association. The most recent ratification was of the Employment Policy Convention 1964 (No. 122) in early 2016 and the GoSL has also expressed its willingness to ratify the Occupational Safety and Health Convention 1981 (No. 155).

2.3.4 Social Issues in Health Policies

National Health Policy (2016–2025): The policy outlines broad strategic directions for the health sector focusing on a people-centered health system and ensuring patient rights and patient/client satisfaction at all health institutions. The policy also seeks to make health care more accessible to the community on an equitable basis, provide basic health care free of cost to the individual at the point of delivery in state sector institutions, promote the involvement of the community in health care, and also commits to introduce services and programs to meet the emerging health needs of the elderly and those affected by physical disabilities, mental health disorders, as well as the health problems of displaced populations.

Population and Reproductive Health Policy (1998): The policy aims at achieving a higher quality of life for its people by providing quality reproductive health information and services, achieving gender equality in the health sector, providing health care and social support for the elderly, promoting the economic benefits of migration and urbanization while controlling their adverse social and health effects (e.g., providing families of female migrant workers with necessary support so that their young children are taken care of while the mother is abroad), and reaching a stable population size in the long term. The policy focuses its attention to groups with unmet health needs such as the urban slums, plantations, internally displaced populations, factory laborers, and the underserved rural areas.

National Policy on Maternal and Child Health Policy (2012): The objective of the policy is to improve maternal and child health (MCH) outcomes primarily directed at women starting with pre pregnancy, during pregnancy, delivery and postpartum period, and at newborns, infants, children and adolescents to 18 years. The policy addresses the health needs of vulnerable women and children with special needs and during an emergency setting, as well as issues around GBV. In regard to GBV, the policy calls to ensure an effective response from preventive and curative health sector for prevention and management of GBV issues, strengthen partnership within the resource network of organization and persons actively involved in the prevention and management of GBV and to empower men and women to promote community mobilization towards prevention and management of GBV.

National Immunization Policy (NIP) (2014): The objective of the policy to protect all citizens against preventable diseases of public health importance as determined by the National Immunization programmer and work with regional/global initiatives to ensure the vaccination of all citizens by ensuring availability of efficacious, safe and quality vaccines and efficient service delivery. The policy notes the requirement to immunize vulnerable groups/high risk categories (immune-suppressed, pregnancy, increased risk of occupational disease exposures etc.) and during special situations (exposure to infectious diseases following disasters, during disease outbreaks, risk of diseases exposure of travelers). Further the policy states in accordance with the country specific requirements and international regulation that all cross-border emigrants and immigrants should be protected from required vaccine preventable diseases.

Mental Health Policy of Sri Lanka (2005 - 2015): The objective of the policy is to improve Sri Lanka's mental health services and make them locally accessible. The emphasis of the policy is on prevention of mental illness; promoting mental well-being; and rehabilitating people. The policy calls for the establishment of comprehensive and community-based service, which is accessible and affordable to promote the mental well-being, and ensure the dignity and rights of all citizens, especially those in vulnerable or disadvantages circumstances. The policy also defines protocols for detention and treatment in emergency situations.

National Health Promotion Policy (2010): The objective of the policy is to mobilize, empower and support individuals, families and communities to promote health and well-being. It recognizes the need to ensure equity and social justice in health promotion and empowerment of individuals and communities and calls to incorporate health promotion into existing social development programmes implemented by health and other sectors. The policy details interventions to mobilize and empower communities in the comprehensive nationwide health promotion actions, including by strengthening community leadership, networking and more resource mobilization. The policy also recommends using new technologies to disseminate health information to the public like through websites and call centers.

Sri Lanka National Migration Health Policy (2014): The objective of the policy is to protect the health and well-being of migrant populations, their families and host populations. The policy provides guidance on programmatic approaches to promote and assure the health of outbound migrants, internal migrants and inbound migrants, including through comprehensive/standardized Health Assessments, health protection programmes, access to pre-departure health related information, mental and physical health services and social welfare support to migrant workers and their families left behind.

Accident and Emergency Care Policy of Sri Lanka (2015): The objective of the policy is to establish a comprehensive accident and emergency care system at all levels of health care. The guiding principles include: the right to health and value for life, equity, social justice and cultural appropriateness of the services; access to affordable patient centered care; and meeting emerging health needs of the country. The

policy states the need to create public awareness and commitment towards successful utilization of A&E services, introducing measures for community empowerment and development of a communication strategy on A&E services for public specially for target groups; school children, occupational groups and others using all selected methods.

National Policy on Healthcare Quality and Safety (2015): The objective of the policy is to ensure continuous quality improvement of healthcare services while addressing the non-health expectations of the people. The policy emphasizes the need to: establish facilities and standards for responsive care for all including the disabled, elderly & special groups in hospitals; develop mechanisms to enhance stakeholder participation in decision making of organizational quality improvement; promote evidence-based, ethically accepted clinical practices; obtain informed consent to assure confidentiality regarding patients' private data and respect for social, spiritual, and cultural needs and beliefs of the patient; and ensure participation and sensitization of staff, patients and community in sustaining quality and safety in healthcare facilities. The policy also aims at developing skills, knowledge and attitudes of the staff to make employees happy and satisfied so that they can contribute effectively and efficiently towards the overall improvement of a healthcare facility.

National Environmental Health Policy: The policy not only focuses on preventing diseases but encourages supportive environments that will contribute to better health outcomes for all people. The policy covers all elements of environmental health such as land, the quality of air, water, food supply and habitation and the maintenance of a safe environment. The policy provides guidance for local communities on efficient disposal management, on compliance measures, appropriate action to be taken during negative health effects, and to strengthen linkages between environment, social and economic factors for collective impact. The policy stresses on the need to maintain equity in the delivery of environmental health services and to reach the most vulnerable communities to create awareness on the importance of preventive, control & sanitation measures in containing epidemics. Further, the policy recommends building capacity at the community level to provide psychosocial support and train public health workers in mental health and social support.

National Nutrition Policy of Sri Lanka (2010): The policy objective is to achieve and maintain the nutritional well-being of all Sri Lankans enabling them to contribute effectively towards national socio-economic growth and development. Specific objectives are to: ensure optimal nutrition throughout the life cycle, enhance capacity to deliver effective & appropriate interventions, ensure effective management of adequate nutrition to vulnerable populations, and ensure food and nutrition security for all citizen. Besides pregnancy, the policy also stresses on the adequate nutrition to vulnerable populations affected particularly during man made and natural disasters as well as during illnesses.

The National Policy on Health Information: The objective of the policy is to provide quality and timely health information for evidence-based decision making through establishment of a ubiquitous, integrated, dynamic, resilient, cost-effective and sustainable Health Information system. The policy is guided by a citizen centric approach; upholds national values of free healthcare, right to health, universal health coverage, equity and social justice; encourages multiple stakeholder involvement, and ensures privacy and confidentiality of healthcare of recipients, sensitivity towards cultural diversity and social norms. The policy also describes interventions to strengthen eHealth governance structure and to utilize Information and Communication Technologies (ICT) solutions and innovations appropriately to improve the quality, efficiency, patient safety, and cost effectiveness health information systems.

2.3.5 Community Consultations and information Disclosure

Right to Information Act 2016: The Right to Information Act No. 12 of 2016 (RTI) established the principle of ‘open government’ and citizens’ access to information in Sri Lanka, in order to foster a culture of transparency and accountability in public authorities. The Act creates a right of access to information held by a public authority, specifies the grounds on which access may be denied, and creates a Right to Information Commission to hear appeals from refusals to grant access to information and monitor compliance with the Act. The Act requires proactive disclosure of certain information, including bi-annual reports by Ministers detailing, among others, the functions and duties of Ministries and Ministry staff, procedures that govern the discharge of duties and exercise of power, and details of budgets and expenditure. The Act also establishes a process whereby Ministers are required to inform the general public, and all persons likely to be affected, about the initiation of projects by their Ministries 3 months prior to their commencement. For urgent projects, the timeframe is 1 week prior to the commencement of the project, and the reasons for urgency

3. OVERVIEW OF THE WORLD BANK'S ENVIRONMENTAL AND SOCIAL FRAMEWORK, RELEVANT ENVIRONMENTAL AND SOCIAL STANDARDS

3.1 THE WORLD BANK'S ENVIRONMENTAL AND SOCIAL FRAMEWORK

The World Bank's Environmental and Social Framework (ESF) sets out the World Bank's commitment to sustainable development, through a Bank Policy and a set of Environmental and Social Standards (ESS) that are designed to support Borrowers' projects, with the aim of ending extreme poverty and promoting shared prosperity.

The ESF comprises of: (1) Vision for Sustainable Development, which sets out the Bank's aspirations regarding environmental and social sustainability; (2) World Bank's Environmental and Social Policy for Investment Project Financing, which sets out the mandatory requirements that apply to the Bank; and (3) The Environmental and Social Standards (ESS), together with their Annexes, which set out the mandatory requirements that apply to the Borrower and projects. The ESSs are expected to: (a) support Borrowers in achieving good international practice relating to environmental and social sustainability, (b) assist Borrowers in fulfilling their national and international environmental and social obligations; (c) enhance nondiscrimination, transparency, participation, accountability and governance; and (d) enhance the sustainable development outcomes of projects through ongoing stakeholder engagement.

There are ten Environmental and Social Standards (ESS) that the Borrower² and the project needs to meet through the project life cycle:

- ESS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- ESS 2: Labor and Working Conditions;
- ESS 3: Resource Efficiency and Pollution Prevention and Management;
- ESS 4: Community Health and Safety;
- ESS 5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement;
- ESS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources;
- ESS 7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities;
- ESS 8: Cultural Heritage;
- ESS 9: Financial Intermediaries; and
- ESS 10: Stakeholder Engagement and Information Disclosure.
-

Environmental and Social Standard ESS1 applies to all projects for which Bank Investment Project Financing (IPF) is sought. ESS1 establishes the importance of: (a) the Borrower's existing environmental and social framework in addressing the risks and impacts of the project; (b) an integrated environmental and social assessment to identify the risks and impacts of a project; (c) effective community engagement through disclosure of project-related information, consultation and effective feedback; and (d) management of environmental and social risks and impacts by the Borrower throughout the project life cycle. The Bank requires that all environmental and social risks and impacts of the project be addressed as part of the environmental and social assessment conducted in accordance with ESS1. ESS2–10 set out the obligations

² Ministry of Health, Nutrition and Indigenous Medicine, Government of Sri Lanka.

of the Borrower in identifying and addressing environmental and social risks and impacts that may require particular attention.

Borrowers and projects are also required to apply the relevant requirements of the World Bank Group Environmental, Health and Safety Guidelines (EHSGs). These are technical reference documents, with general and industry specific examples of Good International Industry Practice (GIIP). The World Bank's Access to Information Policy, which reflects the Bank's commitment to transparency, accountability and good governance, applies to the entire Framework and includes the disclosure obligations that relate to the Bank's Investment Project Financing.

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts

ESS1 sets out the Borrower's responsibilities for assessing, managing and monitoring environmental and social risks and impacts associated with each stage of a project supported by the Bank in order to achieve environmental and social outcomes consistent with the Environmental and Social Standards (ESSs). The ESSs are designed to help Borrowers manage the risks and impacts of a project, and improve their environmental and social performance, through a risk and outcomes-based approach. The environmental and social assessment will be proportionate to the risks and impacts of the project. It will inform the design of the project and be used to identify mitigation measures and actions and to improve decision making. Borrowers will manage environmental and social risks and impacts of the project throughout the project lifecycle in a systematic manner, proportionate to the nature and scale of the project and the potential risks and impacts. The specific objectives of this ESS are:

- To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs.
- To adopt a mitigation hierarchy approach to:
 - Anticipate and avoid risks and impacts;
 - Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
 - Once risks and impacts have been minimized or reduced, mitigate; and
 - Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.
- To adopt differentiated measures so that adverse impacts do not fall disproportionately on the disadvantaged or vulnerable, and they are not disadvantaged in sharing development benefits and opportunities resulting from the project.
- To utilize national environmental and social institutions, systems, laws, regulations and procedures in the assessment, development and implementation of projects, whenever appropriate.
- To promote improved environmental and social performance, in ways which recognize and enhance Borrower capacity.

ESS1 applies to all projects supported by the Bank through Investment Project Financing. As such, ESS1 is relevant to this project and the AFs. The required instruments and processes to comply with this standard are referred to in the ESCP.

ESS2 – Labor and Working Conditions

ESS2 recognizes the importance of employment creation and income generation in the pursuit of poverty reduction and inclusive economic growth. Borrowers can promote sound worker- management relationships and enhance the development benefits of a project by treating workers in the project fairly and providing safe and healthy working conditions. The Borrower will develop and implement written labor management procedures (LMP) applicable to the project. The LMP will set out the way in which project workers will be managed, in accordance with the requirements of national law and this ESS.

ESS2 is relevant to this project and its AFs. The required instruments and processes to comply with this standard are reflected in the ESCP.

ESS3 – Resource Efficiency and Pollution Prevention and Management

This ESS sets out the requirements to address resource efficiency and pollution prevention and management throughout the project life-cycle consistent with GIIP. Objectives of this standards are:

- To promote the sustainable use of resources, including energy, water and raw materials.
- To avoid or minimize adverse impacts on human health and the environment by avoiding or minimizing pollution from project activities.
- To avoid or minimize project-related emissions of short and long-lived climate pollutants 3.
- To avoid or minimize generation of hazardous and non-hazardous waste.
- To minimize and manage the risks and impacts associated with pesticide use.

ESS3 is relevant to this project and its AFs mainly because of hazardous HCW and other construction related waste that will be generated from project activities. The required instruments and processes to comply with this standard are reflected in the ESCP.

ESS4 – Community Health and Safety

ESS4 recognizes that project activities, equipment, and infrastructure can increase community exposure to risks and impacts. Accordingly, this ESS addresses the health, safety, and security risks and impacts on project-affected communities and the corresponding responsibility of Borrowers to avoid or minimize such risks and impacts, with particular attention to people who, because of their particular circumstances, may be vulnerable.

ESS4 is relevant to this project and its AFs given potential risks to the community that could result from project activities such as COVID related isolation, treatment, transport, vaccination and waste management,. The required instruments and processes to comply with this standard are reflected in the ESCP.

ESS5 – Land Acquisition, Restrictions on Land use and Involuntary Resettlement

ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse impacts on communities and persons such as physical displacement (relocation, loss of residential land or loss of shelter), economic displacement (loss of land, assets or access to assets, leading to loss of income sources or other means of livelihood), or both. The term “involuntary resettlement” refers to these impacts. To address such impacts, the objectives of ESS5 is to:

- To avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives. But, avoid forced eviction.
- To mitigate unavoidable adverse social and economic impacts from land acquisition or restrictions on land use by: (a) providing timely compensation for loss of assets at replacement cost and (b) assisting displaced persons in their efforts to improve, or at least restore, their livelihoods and living standards, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.
- To improve living conditions of poor or vulnerable persons who are physically displaced, through provision of adequate housing, access to services and facilities, and security of tenure.
- To conceive and execute resettlement activities as sustainable development programs, providing sufficient investment resources to enable displaced persons to benefit directly from the project, as the nature of the project may warrant.
- To ensure that resettlement activities are planned and implemented with appropriate disclosure of information, meaningful consultation, and the informed participation of those affected.

This standard is currently considered Not Relevant. The project is expected to deliver the all activities including vaccination program through existing facilities. As such, no land acquisition is envisaged or required.

ESS6 – Biodiversity Conservation and Sustainable Management of Living Natural Resources

ESS6 recognizes that protecting and conserving biodiversity and sustainably managing living natural resources are fundamental to sustainable development. Biodiversity is defined as the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part. Biodiversity often underpins ecosystem services valued by humans. Impacts on biodiversity can therefore often adversely affect the delivery of ecosystem services. Accordingly, the objectives of this ESS are:

- To protect and conserve biodiversity and habitats.
- To apply the mitigation hierarchy⁴ and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity.
- To promote the sustainable management of living natural resources.
- To support livelihoods of local communities, including Indigenous Peoples, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities.

All project activities including vaccination program will take place within existing facilities. Any capacity enhancement HCWM will be done within existing systems given the fast track nature of the support. Hence, impacts of the project on natural resources and biodiversity are likely to be none or low, as such this standard is considered Not Relevant.

ESS7 – Indigenous Peoples/Sub-saharan African Historically Underserved Traditional Local Communities

This ESS applies to a distinct social and cultural group possessing the following characteristics in varying degrees: (a) Self-identification as members of a distinct indigenous social and cultural group and recognition of this identity by others; and (b) Collective attachment⁶ to geographically distinct habitats, ancestral territories, or areas of seasonal use or occupation, as well as to the natural resources in these areas; and (c) Customary cultural, economic, social, or political institutions that are distinct or separate from those of the mainstream society or culture; and (d) A distinct language or dialect, often different from the official language or languages of the country or region in which they reside. The main principle of ESS7 is to contribute to poverty reduction and sustainable development by ensuring that projects supported by the Bank enhance opportunities for Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities to participate in, and benefit from, the development process in ways that do not threaten their unique cultural identities and well-being.

ESS7 is relevant to vaccination AF given potential risks of marginalization of the Vedda communities when it comes to accessing vaccines and vaccine related information. The required instruments and processes to comply with this standard are reflected in the ESCP.

ESS8 – Cultural Heritage

ESS8 recognizes that cultural heritage provides continuity in tangible and intangible forms between the past, present and future. Cultural heritage, in its many manifestations, is important as a source of valuable scientific and historical information, as an economic and social asset for development, and as an integral part of people's cultural identity and practice. ESS8 sets out measures designed to protect cultural heritage throughout the project life cycle. The requirements of ESS8 apply to cultural heritage regardless of whether or not it has been legally protected or previously identified or disturbed; and to intangible cultural heritage only if a physical component of a project will have a material impact on such cultural heritage or if a project intends to use such cultural heritage for commercial purposes. In addition, the Borrower is required to establish a chance finds procedure, a project-specific procedure, which will be followed if previously unknown cultural heritage is encountered during project activities. It will be included in all contracts relating to construction of the project, including excavations, demolition, movement of earth, flooding or other changes in the physical environment.

This standard is currently considered Not Relevant as the project is not expected to support any construction or rehabilitation activities that would involve the movement of earth (thereby potentially having an impact on tangible cultural heritage), or other activities that could have an impact on intangible cultural heritage.

ESS9 – Financial Intermediaries

ESS9 recognizes that strong domestic capital and financial markets and access to finance are important for economic development, growth and poverty reduction. Accordingly, Financial Intermediaries (FIs) are required to monitor and manage the environmental and social risks and impacts of their portfolio and FI subprojects, and monitor portfolio risk, as appropriate to the nature of intermediated financing.

This standard is Not Relevant for the suggested project interventions, as no financial intermediaries will be used.

ESS10 – Stakeholder Engagement and Information Disclosure

This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as an essential element of good international practice. Effective stakeholder engagement can improve the environmental and social sustainability of projects, enhance project acceptance, and make a significant contribution to successful project design and implementation. A stakeholder engagement plan is prepared to meet the requirements of this standard.

ESS10 is relevant to this project and its AFs due to several stakeholder groups who would benefit and be at risk from various project activities. The required instruments and processes to comply with this standard are reflected in ESCP and detailed out in the SEP.

3.2 WORLD BANK'S EHS GUIDELINES

The World Bank Groups Environmental, Health, and Safety (EHS) Guidelines are technical reference documents with general and industry specific examples of Good International Industry Practice (GIIP). These industry sector EHS guidelines are designed to be used together with the General EHS Guidelines document, which provides guidance to users on common EHS issues potentially applicable to all industry sectors. EHS Guidelines are applied as required by their respective policies and standards.

The EHS Guidelines contain the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable costs. Application of the EHS Guidelines to existing facilities may involve the establishment of site-specific targets, with an appropriate timetable for achieving them. The applicability of specific technical recommendations should be based on the professional opinion of qualified and experienced persons. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures than those provided in these EHS Guidelines are appropriate, in view of specific project circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

The **World Bank Group General EHS Guidelines** contain information on cross-cutting environmental, health, and safety issues potentially applicable to construction and can be downloaded via the following link: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

The **World Bank Group EHS Guidelines for Construction Materials Extraction** is also applicable to the project and used as key guidance provided to contractors on the management of environmental health and safety during construction material extraction in addition to specific guidance provided in the ESMF. This document includes information relevant to construction materials extraction activities such as aggregates, limestone, slates, sand, gravel, clay, gypsum, feldspar, silica sands, and quartzite, as well as to the extraction of dimension stone. It addresses stand-alone projects and extraction activities supporting construction, civil works, and cement projects. Although the construction materials extraction guidelines Emphasize major and complex extraction schemes, the concepts are also applicable to small operations and should be used for guidance. These guidelines can also be downloaded via the link provided above.

The **World Bank Group ESH Guidelines for Hazardous Waste** is also applicable and can be used for guidance on the management of infectious and other forms of health care waste which are categorized as hazardous in nature. These guidelines apply to projects that use, store, or handle any quantity of hazardous materials (Hazmats), defined as materials that represent a risk to human health, property, or the environment due to their physical or chemical characteristics. Hazmats can be classified according to the hazard as explosives; compressed gases, including toxic or flammable gases; flammable liquids; flammable solids; oxidizing substances; toxic materials; radioactive material; and corrosive substances. Guidance on the transport of hazardous materials is covered in Section 3 of the document. When a hazardous material is no longer usable for its original purpose and is intended for disposal, but still has hazardous properties, it is considered a hazardous waste (see Section 1.4 of the guide). This guidance is intended to be applied in conjunction with traditional occupational health and safety and emergency preparedness programs which are included in Section 2.0 on Occupational Health and Safety Management, and Section 3.7 on Emergency Preparedness and Response. Guidance on the Transport of Hazardous Materials is provided in Section 3.5.

The **World Bank Group EHS Guidelines for Health Care Facilities** is also applicable and can be used for guidance for the design and operation of HCFs. It includes information relevant to the management of EHS issues associated with health care facilities (HCF) which includes a diverse range of facilities and activities involving general hospitals and small inpatient primary care hospitals, as well as outpatient, assisted living, and hospice facilities. Ancillary facilities may include medical laboratories and research facilities, mortuary centers, and blood banks and collection services.

The **World Bank Group EHS Guidelines for Occupational Health and Safety & Community Health and Safety** are also applicable and can be used for guidance for the implementation of project activities. These two guidelines complement each other and includes information relevant to the management of EHS issues associated with risks to occupational health and safety of different groups implementing project activities as well as cover areas such as life and fire safety, traffic safety , emergency preparedness etc specifically addressing impacts that may arise outside the immediate project boundaries.

3.3 WHO GUIDELINES

To help countries navigate through these challenges, the World Health Organization (WHO) has updated operational planning guidelines in balancing the demands of responding directly to COVID-19 while maintaining essential health service delivery and mitigating the risk of system collapse. This includes a set of targeted immediate actions that countries should consider at national, regional, and local level to reorganize and maintain access to high-quality essential health services for all.

The WHO is maintaining a website specific to the COVID-19 pandemic with up-to-date country and technical guidance. As the situation remains fluid it is critical that those managing both the national response as well as specific health care facilities and programs keep abreast of guidance provided by the WHO and other international best practice.

WHO provides technical leadership for vaccine introduction, technical support for updating the NDVP, developing guidelines and conduct training on AEFI surveillance for COVID-19 vaccine related issues. A summary of key relevant guidance and access links are presented in **Annex 2** along with the vaccine readiness assessment and surveillance of adverse events following immunization³.

³ https://www.who.int/vaccine_safety/publications/aeft_surveillance/en/

4. ENVIRONMENTAL AND SOCIAL BASELINE AND STATUS WITH REGARD TO HEALTH CARE WASTE MANAGEMENT

4.1 PROJECT LOCATIONS

Sri Lanka is an island in the Indian Ocean with a land extent of 65,610 Km². It has a widely varying topography characterized by three distinct zones (peneplains) distinguishable by elevation. South Central part of Sri Lanka, the highest peneplain, is the rugged central highlands, consisting of rolling hills with peaks rising to 2500 m above sea level, steep escarpments and gorges. The land descends from the central highlands to extensive internal plains which makes most of the island's surface at 30 – 300 m above sea level elevations and the coastal belt that surrounds the island with a 1340 Km long coastline that consists of scenic sandy beaches indented by coastal lagoons, bays, heads and wetlands. Most of Sri Lanka's major rivers rise in the central highlands and flow in a radial pattern to the sea. Sri Lanka faces critical environmental and social challenges of which deforestation, land degradation, loss of soil fertility, soil erosion and landslides, water and soil pollution, solid waste management and human-wildlife conflict take significant proportions. Except for areas protected under the country's conservation laws, most of the island is inhabited with fairly good road access and other basic infrastructure.

The project will be implemented island wide in selected health care institutions. The following table summarizes proposed activities under each component and the intended geographical coverage.

Component	Brief description of activities	Geographical coverage
Component 1	- Strengthening Surveillance and Response Systems (<i>emergency operations center, training, awareness, provision of PPEs and mobility support to public health cadre aimed at disease containment</i>) - Strengthening capacity for emergency response (<i>training of hospital staff, preparing emergency plans, provision of PPEs, infection control, safe transportation for infected patients, monitoring systems</i>) - Setting up isolation wards and strengthening capacity of intensive care units (<i>in selected secondary and tertiary health care facilities so that at least each district has one such facility</i>); setting up isolation units in public buildings to prevent hospitals becoming hot spots for infections; supply emergency medical equipment - Community engagement and risk communication (<i>public communication and outreach on COVID 19 prevention, containment and treatment</i>) - Social and Financial support to vulnerable groups (<i>supply of essential medical needs to care homes, training for social workers, protocols for safe transportation and burial/cremation, psycho social support, communication on GBV and child protection, counselling to households, cash transfer for elderly, persons with disabilities and Chronic Kidney Disease (CKD) patients from low-income households</i>)	Island wide

	The procurement and safe deployment of COVID-19 vaccines (purchase of vaccines, logistics for vaccination, deployment expenditures, expansion of necessary storage capacity, cold chain equipment, PPEs, medical and non-medical consumables, other goods, services and operating costs related to vaccination, incremental service delivery costs that supports the benefits of clinical and non-clinical staff supporting vaccine deployment.	
Component 2	- Strengthening the National Institute of Infectious Diseases -NIID (<i>expansion of isolation capacity, construction of new isolation centre with modern technological facilities including negative pressure rooms, ICUs and waste disposal and drainage systems</i>) - Establishment of regional quarantine centres and testing centres (<i>to supplement the capacity of the NIID regional centers to be set up</i>) - The establishment of Bio-Safety Level (BSL) 3 Laboratory Facilities at the National Medical Research Institute (MRI) - Strengthening Laboratory Facilities and Information Systems (<i>provision of testing kits, PPEs, equipment for safe transportation of biological samples, training of lab technicians</i>)	NIID – Mulleriyawa Island wide MRI – Colombo Island wide
Component 3	Strengthening Multi-sectoral, National institutions and Platforms for One Health (<i>needs assessment for national protocols for detection, surveillance and response for zoonotic diseases, mechanisms for early detection of zoonoses, conducting awareness on anti-microbial resistance and enforcement of regulations</i>)	Island wide
Component 4	Implementation Management and Monitoring and Evaluation	Island wide
Component 5	Contingent Emergency Response Component	Island wide

It is important to note here that the secondary, tertiary and specialized care health institutions are typically located in built-up urban and peri-urban areas whilst most of the primary care hospitals are typically located in rural areas with generally good accessibility.

4.2 BASELINE OF SOCIO-ECONOMIC FACTORS/ISUES

This section describes the overall baseline conditions of Sri Lanka in terms of its socio-economic and cultural environment.

4.2.1 Demography

Sri Lanka is an island in the Indian Ocean about 28 kilometres (18 mi.) off the south-eastern coast of India with a population of about 21.2 million. Population density is highest in the southwest where Colombo, the country's main port and industrial centre, is located. The net population growth is about 1.3% (See Table 3).

Table 3: Population and Land Area by Provinces

Province	Population ('000)	Land Area (sq. km)	Population Density
Western	5,979	3,593	1,664
Central	2,658	5,575	477
Southern	2,556	5,383	475
Northern	1,094	8,290	132
Eastern	1,615	9,361	173
North Western	2,448	7,506	326
North Central	1,312	9,741	135
Uva	1,316	8,335	158
Sabargamuwa	1,988	4,921	404
TOTAL	20,966	62,705	334

Sri Lanka is ethnically, linguistically, and religiously diverse. Sinhalese are concentrated in the densely populated southwest. Sri Lankan Tamils, citizens whose ancestors have lived on the island for centuries, live predominantly in the north and east. Indian Tamils are a distinct ethnic group who were brought to Sri Lanka in the 19th century as tea and rubber plantation workers, and they remain concentrated in the "tea country" of south-central Sri Lanka. Other minorities include: Muslims (both Moors and Malays); Burghers (descendants of European colonists, principally from Portugal, the Netherlands and the UK); and the forest dwellers, Veddahs (See Table 4).

Table 4: Composition of the Population

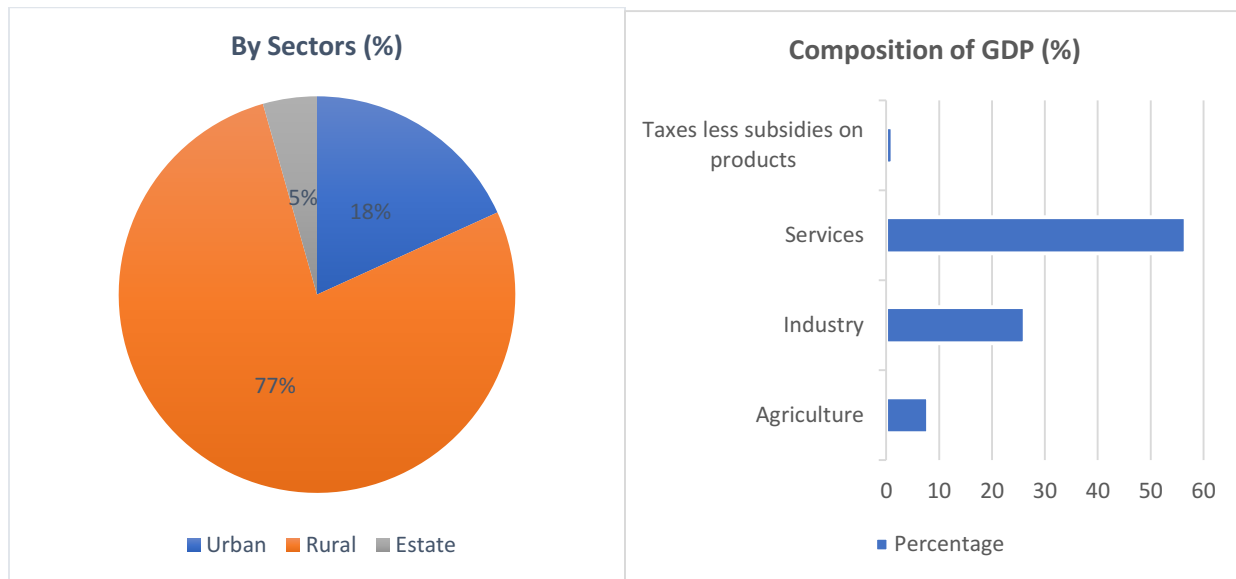
By Ethnicity	%	By Religion	%
Sinhalese	74.9	Buddhist	70.1
Sri Lankan Tamil	11.2	Hindu	12.6
Indian Tamil	4.1	Islam	9.7
Sri Lankan Muslims (Moors, Malays)	9.3	Christian & Roman Catholic	7.6
Other (Burghers, Veddahs)	0.5	Other	0

Most Sinhalese are Buddhist; most Tamils are Hindu; and the Malays and Moors are Muslim. Having said that, a sizable minorities of both Sinhalese and Tamils are Christians, most of whom are Roman Catholic (See Table 4). The Burgher population is mostly Roman Catholic or Presbyterian.

4.2.2 Economy

Sri Lanka is an upper-middle-income country with a gross domestic product (GDP) per capita of US\$4,102 (2018) and a total population of 21.7 million. The Sri Lankan economy is transitioning from being predominantly rural-based to urbanised economy-oriented around manufacturing and services. At present, the services sector contributes to 56.6%, industry sector 26.2% and agriculture sector 7.9% of the GDP (Figure 2).

Figure 2: Basic Profile of the Economy



Following 30 years of civil war that ended in 2009, Sri Lanka's economy grew at an average of 5.6 percent during 2010–2018, reflecting a peace dividend and a determined policy thrust toward reconstruction and growth.⁴ However, economic growth witnessed a slowdown in the last few years, especially during 2019 when the services sector led by tourism, retail and financial services declined by 4.6% in the backdrop of the Easter Sunday attacks, compared to a growth of 5.7% the previous year⁵.

Over the past few years, Sri Lanka has been grappling with large fiscal deficits and public debt management issues—in 2015, the country recorded a fiscal deficit of 7.6 percent of GDP with public debt levels of 77.6 percent of GDP⁶ which reduced to 4.4% at the end of 2019 though public debt levels remained elevated at 86.8⁷ percent of GDP at the end of the year. These high public debt levels have been exacerbated by weak foreign direct investment (FDI) flows, leading the Government to rely more and more on domestic and foreign loans to bridge the fiscal deficit. In terms of trade, Sri Lanka's largest imports are from China and India, comprising 18.5% and 19% respectively of total imports in 2018.

The **COVID-19 outbreak** is expected to lead to a further contraction in the economy with GDP growth rate expected to be -0.5 to -1 percent, although the full extent of the impact of the pandemic is not yet clear.⁸ Like in many other countries, in Sri Lanka too, the COVID-19 pandemic has not only impacted the country's economy but has brought many sectors to a standstill. The hit on apparel exports is expected to result in a significant decline in foreign currency income for the country. Tourist arrivals in March dropped by 70.8% mainly due to restrictions in issuing visas and the closure of all ports of entry for passengers from mid-March amidst several global travel restrictions. Inward worker remittances is also expected to decline owing to the global economic slowdown. Other sectors that have been identified to suffer the most are

⁴ <https://www.worldbank.org/en/country/srilanka/overview>

⁵ KPMG COVID-19 Economic Impact - assets.kpmg

⁶ <http://www.treasury.gov.lk/sri-lanka-at-a-glance>

⁷ CBSL releases 2019 annual report

⁸ International Monetary Fund on Sri Lanka: <https://www.imf.org/en/Countries/LKA>

manufacturing, agriculture, retail and consumer sector, with small and medium scale enterprises being the worst affected. The 2019 growth stimulus package and possible additional spending in the wake of the COVID-19 outbreak will exert pressure on fiscal sustainability, in a context of preexisting constrained fiscal space. Thus, macroeconomic vulnerabilities will remain high, with limited fiscal buffers, high indebtedness and large refinancing needs.⁹

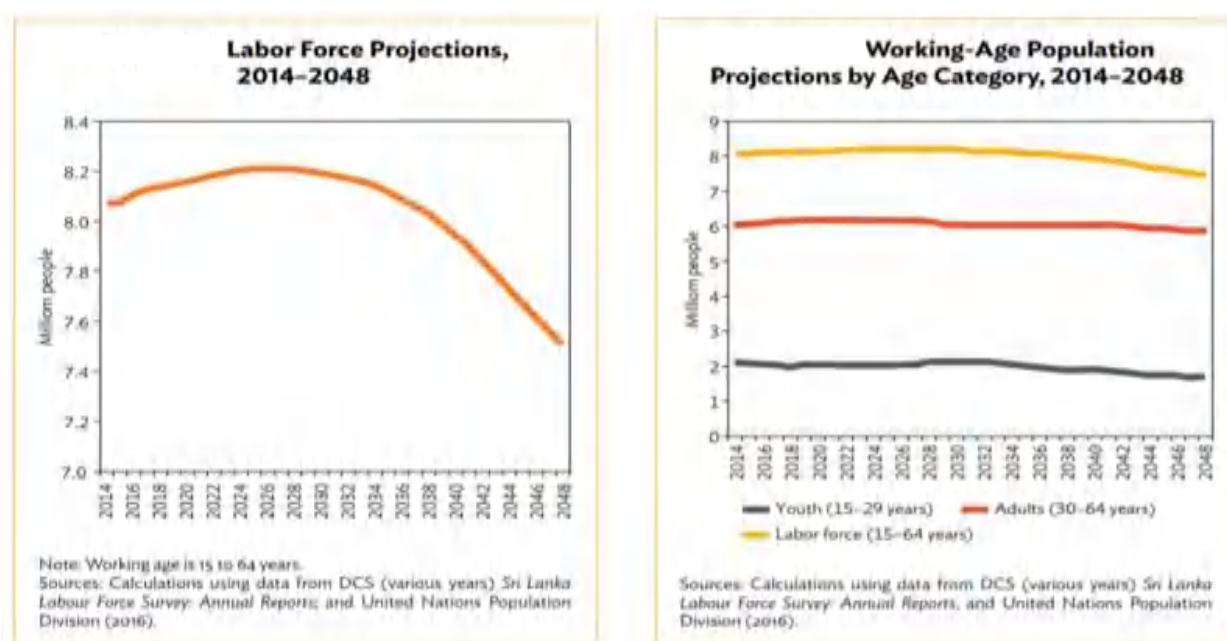
In addition to this, the people of Sri Lanka are expected to face a wave of salary reductions and unemployment with companies attempting to make ends meet, and the impact will be greatest on the informal sector. Thus COVID-19 is triggering an economic fallout that will impact poverty rates and increase inequality. Protracted COVID-19 crisis may threaten food security, especially for the most vulnerable.

4.2.3 Labor market

Labor Force Participation

Labor force projections show that the labor force in Sri Lanka will increase very gradually until 2028, and then start to decline. Over the years, nonagricultural employment has grown faster than agricultural employment, indicating a shift away from agriculture (nonagricultural employment increased from 69% of total employment in 2006 to 73% in 2014¹⁰). Still, more than one-quarter of total employment remains in agriculture, indicating that a large proportion of the population depends on this sector for employment.

Figure 3: Projections on Labor Force and Working-Age Population



⁹ World Bank, 'The Cursed Blessing of Public Banks: The Economic Impact of COVID-19 on South Asia,' World Bank Group, 2020.

¹⁰ <https://www.adb.org/sites/default/files/publication/382296/sri-lanka-employment-diagnostic.pdf>

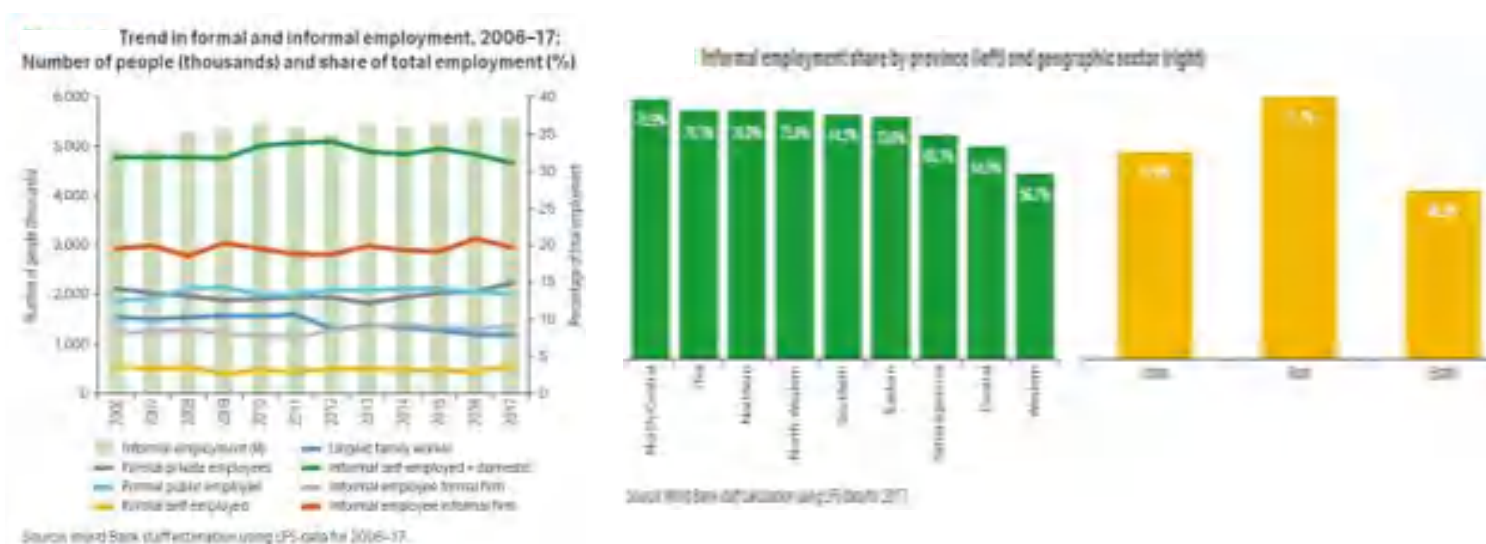
Yet, the subsectors that contributed to GDP growth have also contributed to employment creation. For example, the number of people employed clearly increased in manufacturing; construction; mining and quarrying; and electricity, gas, and water supply. Employment also increased marginally in wholesale and retail trade; repair of motor vehicles, motorcycles, and personal and household goods; and transport, storage, and communication subsectors.

Small and micro businesses constitute most of the labor force in the country. There are nearly one million micro businesses employing less than 10 employees, accounting for around 44% or 1.4 million of the labor force. Additionally, there are over 70,000 small businesses which employ between 11-50 people, accounting for half a million or 17% of the labor force¹¹. Evidence shows that small and informal enterprises are more vulnerable to exogenous shocks like the COVID-19 pandemic, given their limited financial, managerial and information resources.

Informal Sector

In Sri Lanka, the informal sector accounts for nearly 70 percent of jobs, and this figure has not changed much since 2006, the first year such estimates became possible. In terms of the type of employment, the public sector is almost entirely formal, with only a few workers reporting themselves as informally employed. However, when only private sector workers are considered, the share of informal employment amounts to nearly 80 percent. Unpaid family workers, most of them women, constituted almost 8 percent of the workforce. Domestic workers, defined as those reported to be “working for a household,” accounted for a little more than 50,000 workers (or 0.7 percent of total employment).¹²

Figure 4: Trends in Informal Employment



¹¹ <http://www.ft.lk/front-page/Partial-shutdown-sinks-small-businesses-daily-wage-earners/44-697783>

¹² Informality, Job Quality, and Welfare, in Sri Lanka (2020) – World Bank

Analysis by sector of activity shows that more than 70 percent of workers are informally employed in agriculture, construction, commerce, and transport and communications. Analysis by geographic sector shows that the rural sector has the highest share of informal workers and the estate sector the lowest share — likely because most plantation workers are entitled to pension benefits. Informal employment is high almost everywhere except the Western Province. In Sri Lanka, where public health care is universal and free, the main source of concern is the lack of protection and benefits, in particular social security, afforded by the informal sector. Further precarious nature, low quality, and low wages of many informal jobs lead to higher poverty and vulnerability. As it is, compared to formal workers, informal workers are on average older and less educated.

Migrant Workers

Sri Lanka has historically been a migrant-sending country, though the skills and gender composition of migrants are undergoing structural changes amid a decline in departures. The overall number of migrants continued to rise through 2014, when it surpassed 300,000, but it has since been falling rapidly. Housemaids have made up a large share of all migrants, but their numbers have been decreasing since 2005 after peaking at around 137,000¹³. Generally speaking, such a decline is to be expected—as the domestic economy grows and living standards improve, there is a narrowing of the expected wage gap between Sri Lanka and the destination country which is resulting in downward trend in outmigration.

4.2.4 Human Development

Sri Lanka has made significant progress in human development. Social indicators rank among the highest in South Asia and compare favourably with those in middle-income countries. Yet, large gaps remain in certain areas. Progress has been slower among the estate sector population, which continues to be one of the most marginalized groups as measured by poverty, access to services, including education, and access to potable water. Challenges remain highest in the post-conflict areas, particularly the Northern Province, where most welfare outcomes continue to lag behind the rest of the country.

Table 5: Status of Human Development Indicators in Sri Lanka

Indicators	
Labour Force Participation Rate (%)	
Total	53.8%
Male	74.7%
Female	35.9%
Unemployment Rate (% of labour force)	4.7%
Life Expectancy (Avg. years)	74.9
Literacy Rate (Aged 15 years and above)	
Total	93.2%
Male	94.1
Female	92.4
Human Development Index	0.757

¹³ Sri Lanka Poverty Update 2019 - The World Bank South Asia

Education

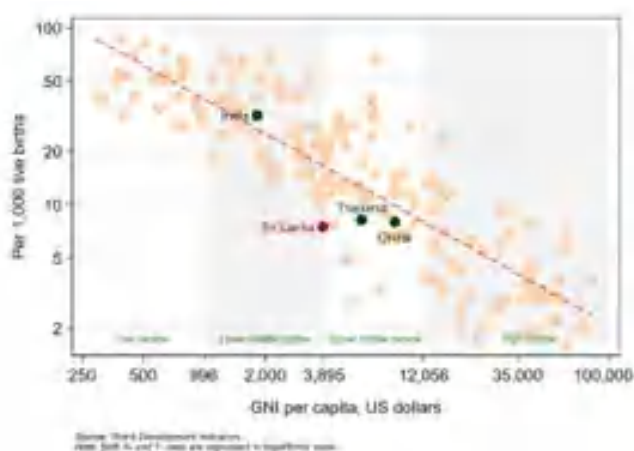
Although Sri Lanka is well-known for fast progress in educational attainment, it lags behind other middle-income countries in terms of early childhood education, higher education participation and quality, private sector orientation of the technical education and vocational training system and learning outcomes and socioemotional skills. About 96 percent of its citizens have completed primary school, 87 percent have finished secondary school, and there is gender parity in school completion at primary and secondary levels. The net enrollment rate (NER) is 99 percent in primary education and 84 percent in junior secondary, and there is gender parity in both. In senior secondary education, NER is 70 percent, which is relatively high for middle-income countries. However, out of a General Certificate of Education Ordinary-Level (GCE O-level) cohort of about 450,000 students, only about 20 percent will attend a higher education institution (HEI), and another 33 percent will attend TVET programs, leaving about 47 percent of them with no options other than exiting the education and training sector, entering the labor market, or going abroad for further studies.¹⁴ The result is that Sri Lanka faces an acute shortage of the high-level human resources that are needed for the advanced industrial and service sector activities of a globally competitive upper-middle-income country.

Health

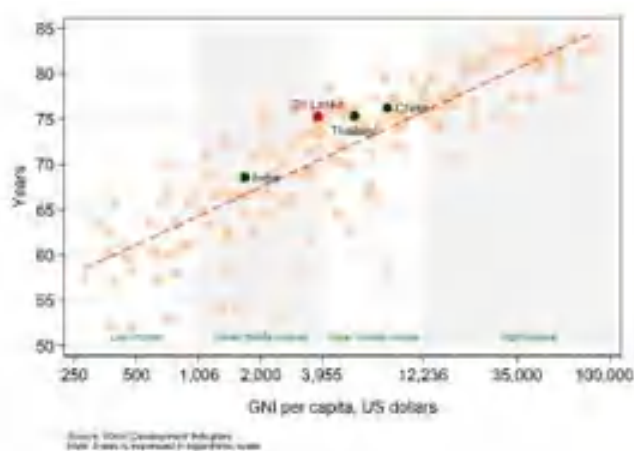
For over thirty years, Sri Lanka's health system has been known globally as one of the best performing in the world, having achieved "good health at low cost". This reputation largely remains, and for good reason: it has already achieved maternal, under-five and neonatal mortality rates that are less than half the 2030 SDG targets. Figure 1 shows how it compares globally on key health indicators.

Figure 5: Sri Lanka's Performance on Health Indicators

Infant mortality rate



Life expectancy at birth



¹⁴ Sri Lanka Education Sector Assessment Achievements, Challenges, and Policy Options (2017) – World Bank

Over the recent years, the health sector has however been showing signs of stress in responding to the changing health needs reflective of the ongoing demographic and epidemiological transition. Non-communicable diseases (NCDs) already account for 81 percent of total deaths and 77 percent of disability-adjusted life years (DALYs). Because of years lived with morbidity and disability, healthy life expectancy at birth in Sri Lanka in 2017 was 10 years lower than life expectancy at birth (77).¹⁵ This is partly a result of NCDs. Sri Lanka is also one of the fastest aging populations—the growth of the elderly population is far faster – almost double – than that of other countries in the South Asia Region.

In terms of the existing capacity to respond to health emergencies, at 2016 External Evaluation (JEE) of the International Health Regulations (IHR), the health system scored poorly on emergency preparedness, biosafety and biosecurity, and personnel deployment and management such suggesting limitations in capacity to respond to public health emergencies. The country has only one institution – the National Institute of Infectious Disease (NIID), Muleriyawa with the facility to handle isolation and treatment of suspected and confirmed cases of COVID-19 and it has only 30 beds in isolation cohorts. Other constraints in the health system include shortage of trained health care providers, non-compliance by general public, health workers, on safety measures, shortage of Personal Protection Equipment (PPE), major gaps in biosafety, poor decontamination practices, shortage of testing kits and labs with required capacities, and limited facilities equipped with isolation wards for quarantine and treatment.

4.2.5 Poverty

Sri Lanka has made strong progress in reducing poverty and sharing prosperity among the less well-off in recent years. Using Sri Lanka’s national poverty line, the poverty headcount rate fell from 8.9 percent in 2009/10 to 6.7 percent in 2012/13, and then further to 4.1 percent in 2016. Moreover, extreme poverty has been almost eliminated, with only 0.8 percent of the population living on less than \$1.90 per person per day. However, poverty remains concentrated in rural areas—of the poor, 82 percent were rural residents while only 8 percent lived in urban areas and 10 percent in the estate sector. While the Northern and Eastern Provinces have the highest poverty rates among provinces, a large number of poor live in and around the predominantly rural and agricultural Central Highlands. Districts with the largest number of poor are in Ratnapura, Kandy, and Badulla, which together account for about a quarter of all the poor. Further, estate sector¹⁶ residents remain one of the most marginalized group in Sri Lanka, with almost a quarter classified as poor according to the \$3.20 international poverty line.¹⁷

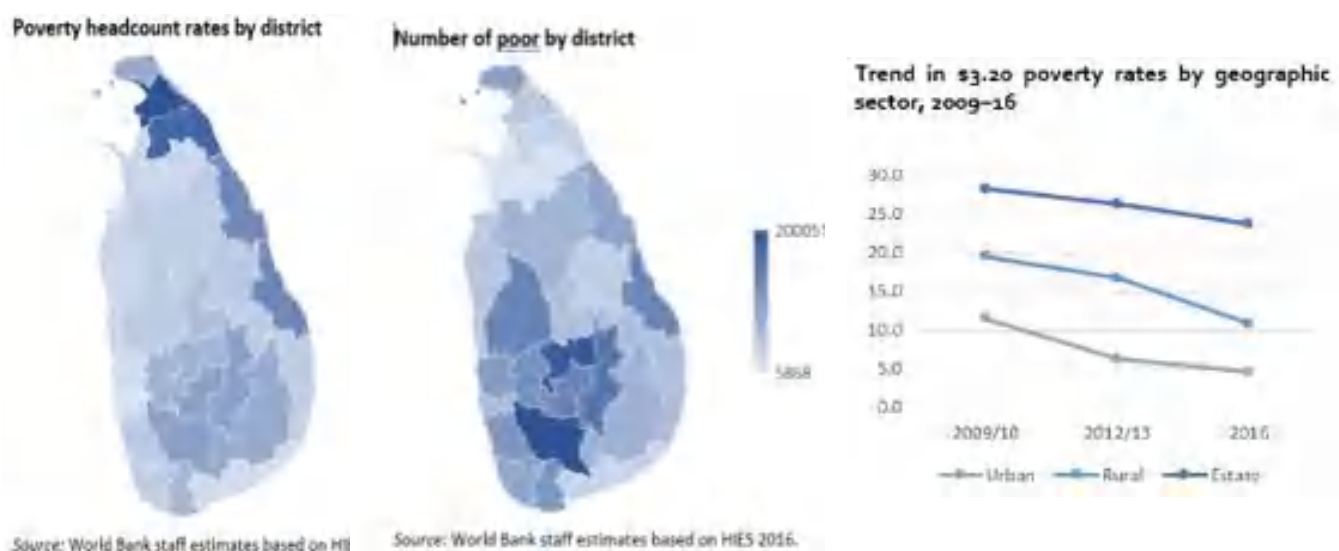
Further, while official national poverty is low, Sri Lankans remain highly vulnerable to various shocks. A large number of people remains just a small shock away from falling back into poverty. The risk factors for vulnerability are diverse and include cultural norms, insecurity, difficulties accessing economic opportunities, and climatic shocks and natural disasters.

¹⁵ IHME, 2018.

¹⁶ The estate sector consists mainly of tea or rubber plantations that rely on resident workers and are managed or owned by the state, regional plantation companies, and individuals or families.¹⁶ These plantations were created during the British colonial period as self-sufficient enclaves. Labor was imported from South India, and workers were confined within the plantation structure, resulting in “residential labor.” Housing, health care, and education were provided by the estate management.

¹⁷ Sri Lanka Poverty Update 2019 - The World Bank South Asia

Figure 6: Trends and Patterns of Poverty



4.2.6 Gender

Sri Lanka has made significant progress towards achieving gender equality, especially in areas of health and education. However, due to gender norms and structural barriers, women in Sri Lanka lag behind on many fronts. Out of the 8.6 million economically active population, 64% are males and only 35% are females. Women constitute 52% of Sri Lanka's population, but female representation in parliament is only 5.3%. The labor force participation of women as of 2017 is 36.6% of the total population and has steadily declined in last three decades. Moreover, the gap between the poorer and less educated women and more educated and wealthier women in terms of labor market outcomes is widening.¹⁸ Women's unemployment rates are highest in rural areas constituting 7.5% as against 2.9% for men. In the Northern and Eastern provinces, the female labor force participation rate is also low at 22 % and 19 % respectively.¹⁹ Besides the low labor force participation rate, women are more likely to work in low skill and low-income jobs.

Further, women's labor force participation and employment decisions continue being constrained by legal gender differences (e.g., no access to a number of occupations that require working night hours,²⁰ legal

¹⁸ Solotaroff, Jennifer L., George Joseph, and Anne T. Kuriakose. 2017. "Getting to Work: Unlocking Women's Potential in Sri Lanka's Labor Force." Overview booklet. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO

¹⁹ O'Donnell, Anna, Mohamed Ghani Razaak, Markus Kostner, and Jeeva Perumpillai-Essex. 2018. Shadows of Conflict in Northern and Eastern Sri Lanka: Socioeconomic Challenges and a Way Forward. International Development in Focus. Washington, DC: World Bank. doi:10.1596/978-1-4648-1344-3 License: Creative Commons Attribution CC BY 3.0 IGO

²⁰ Employment of Women, Young Persons, and Children Act No. 47 of 1956. Available at: https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=en&p_isn=50754

restrictions for women to work in mining,²¹ increase in period of paid maternity leave to 12 weeks (84 days)²² serving as a disincentive for employers to hire more women). In Sri Lanka, women also have limited access to financial capital when establishing small and medium-sized enterprises (SMEs). Only 24% of women against 36% men own bank accounts. Women also lack land and asset ownership which limits women's ability to engage and grow their agricultural production and livelihoods. While legally women and men have equal rights to own and inherit assets in Sri Lanka, only 16 % of all privately-owned land in the country belongs to women.²³

While in Sri Lanka sexual harassment as an offence that is criminally punishable, 90% of women report being subjected to sexual harassment on public buses and trains, of which only 4% had sought help from the police.²⁴ Further, the 2016 DHS data indicates that 17% of ever-married women had experienced intimate partner violence during the preceding 12 months²⁵. The impact of GBV and sexual harassment is critical--Among those who reported sexual harassment in public transport, 44% had said that their personal lives had been affected by it. Further, in a qualitative study conducted by Care International in four districts, over a quarter of the women who were subjected to intimate partner violence (IPV) had to stay in bed, 16% had to take days off work and 32% had to seek medical attention, while 25% of the women reported having suicidal thoughts.²⁶

4.2.7 Vulnerable groups

Women-headed households and war widows are disproportionally represented among the poorest. In Sri Lanka, 1.2 million households or 23 % of households are female-headed. War-affected women are particularly vulnerable since they face an additional layer of challenges including exclusion from inheritance, inability to acquire property rights, lack of access to land, and inability to participate in public realm due to negative social norms and perceptions about widows and women who live alone.²⁷ **Estate workers** fare much worse on several social indicators than the general population. In addition to a high concentration of poverty among estate workers, the estate sector continues to be plagued by chronic malnutrition and by lack of access to proper housing, water and sanitation, health services, and education. **Internally Displaced Persons and Returnees** are in many cases still struggling to rebuild their lives, even though it has now been 10 years since the end of the conflict. Another group that is particularly vulnerable are the **Vedddhas**, forest-dwellers, who have been impacted by development projects that led to both involuntary and voluntary resettlements in 1980's and hence have been deprived of access to their

21 Mines and Mineral Act No. 33. Available at http://www.commonlii.org/lk/legis/num_act/mama33o1992221/

22 Maternity Benefits (Amendment) Act, (No. 15 of 2018). Available at: https://www.ilo.org/dyn/natlex/natlex4.detail?p_lang=&p_isn=106759&p_classification=16

23 Sri Lanka Agriculture and Environment Statistics Division. 2002.

24 UNFPA. 2017. Sexual Harassment on Public Buses and Trains in Sri Lanka. Available at: https://srilanka.unfpa.org/sites/default/files/pub-pdf/FINAL%20POLICY%20BRIEF%20-%20ENGLISH_0.pdf

25 World Health Organization. 2018. Country profile on gender-based violence in Sri Lanka. World Health Organization. Country Office for Sri-Lanka

26 De Mel, N., Peiris, P., & Gomez, S. (2013). Broadening Gender: why Masculinities Matter: Attitudes, Practices and Gender-based Violence in Four Districts in Sri Lanka. CARE international.

27 Mapping of Socio-Economic Support Services to Female Headed Households in the Northern Province of Sri Lanka (2015) – United Nations.

traditional source of livelihoods. The Veddha communities thus continue to struggle with no proper livelihoods to fend for themselves, poor education attainment and living with minimum living standards.

When compounded with poverty and high rates of unemployment, **youth** can also be considered a vulnerable group. Sri Lanka's youth population (15- 29 years), which constitutes nearly 1/4th of the total country population, is unable to enjoy opportunities to participate effectively in the labor market and the public realm – youth unemployment is 23.3%, especially when compared to national average of 5.1%. Further, disparities exist between young women's unemployment which is at 37.5% while young men's unemployment is at 17.5%²⁸. With weak links to the labor market and social institutions, the youth become increasingly disenfranchised.

Cruelty to children is also on the rise in Sri Lanka. According to government reports, violence against children is on the rise, with 2,068 cases reported in 2014 and over 12,000 cases in 2015,²⁹ an increase partly due to increased reporting. While more than 14,500 children live in long-term state residential institutions, it is estimated that an additional 20,000 children live in unregulated private and religious orphanages or boarding houses. The country's child-protection system lacks the necessary framework, capacity and resources to prevent the abuse, neglect and exploitation of children and to provide timely responses.³⁰

People (including children) with disabilities lack equal access to education, employment opportunities, and safety. The labour force participation rate of the population with difficulties is low (29.1 per cent compared to 54.2 per cent for those without difficulties). Women with disabilities face higher challenges with getting a job than their male counterparts. Additionally, people with disabilities have limited access to social protection schemes, including insurance coverage provided by the Government, CSOs and the private sector. Other barriers include insufficient sign language instructors and the unavailability of vocational training systems for people with disabilities; lack of understanding by employers of the skills and abilities of people who are disabled; and negative societal attitudes. At present, there are 153 centers for people with special needs. Most centers are run by private sector, NGO or religious organizations. There are approximately 3000 special needs people living in those centers.

Sri Lanka also faces a looming demographic burden with the increasing **elderly population**. Driven by a downtrend in the birth rate and increased life expectancy (at 74 years in 2012), the dependency ratio is gradually rising as the population ages. By 2021, one in six Sri Lankans will be over 60 years. Only around 40-50% of the current elders are covered under some form of social protection/old-age benefit programme like pension schemes, provident funds or monthly cash transfers. At present, there are 330 eldercare centers according to the National Secretariat for Elders Sri Lanka.

Finally, the **chronically ill** people, especially those infected with chronic ailments such as Chronic kidney disease (CKD) and cancer can also be considered vulnerable. There is a definite increase in the number of cancer patients in the past decade. According World Health Organization, a total of 16,963 new cancer patients were registered for treatment during the year 2010 (males - 7,993 and females - 8,970) and in 2018, the number had increased to 23,530 (10,645 and females - 12,885).

²⁸ World Economic Forum. 2018. The Global Gender Gap Report. Available at: <https://www.weforum.org/reports/the-global-gender-gap-report-2018>

²⁹ Corporal punishment, while illegal, is practised in schools and accepted by parents.

³⁰ UNICEF Sri Lanka Country Programme Document 2018-2022

To cater to the needs and concerns of these poor vulnerable groups, Sri Lanka has an extensive social protection system in place. However, these programmes are managed and implemented by numerous department and agencies. This fragmented social protection system in the country has resulted in programme overlap and high administrative costs. A brief summary of the major noncontributory cash transfer programs are given below:

- **Samurdhi cash allowance-** Samurdhi is the largest scheme in Sri Lanka, an integrated welfare program, that provides cash transfers, microfinance, and various community and livelihood development activities. Low income families are paid a cash allowance of LKR 420/-3500/- per month depending on the number of family members to 1,798,655 low income families by the Department of Samurdhi Development. There are 600,339 families in the waiting list. In 2015, the program covered 1.48 million families, approximately 30 percent of the population.
- **Financial Assistance to Elders** – Financial support to elders program provides LKR 2000/- per month to low income persons above 70 years old. There are 416,764 beneficiaries receiving financial assistance. In addition, there are 142,345 in the waiting list. This program is being implemented by the National Secretariat for Elders (NSE).
- **Payments for People with Special Needs** – The National Secretariat for the People with Disabilities, MWCASS provide Rs. 5,000/- per month benefits to 72,000 persons with special needs. There are 38,791 people in the waiting list.
- **Payment for People with Chronic Kidney Disease-** Rs. 5,000/- per month is given to 25,320 low income people with CKD. There are 13,850 people in the waiting list.

Despite these social protection programmes, the **impacts of the pandemic on vulnerable groups**, is bound to be very critical. Existing socio-economic inequalities in Sri Lanka and elsewhere reduce the capacity of certain groups of people to cope with the effects of the COVID crisis. In Sri Lanka, women, elderly, those with chronic illnesses, disabled, daily wage earners, informal sector workers, and other population groups who are already vulnerable, now face additional pressure. In the absence of adequate resources and safety nets to protect them against COVID-19 impacts, vulnerable people face a higher risk of contracting the virus and bear a greater brunt of the adverse socio-economic impacts caused by the pandemic including job loss, reduced household income and reduced access to basic services. School closures have an added downstream effect on vulnerable families that cannot afford childcare and, as a result, must cut back working hours. Given lack of cash and savings, this vulnerable group is also unable to stock up food for extended curfews. Further, labourers and cleaners in health care facilities and in isolation centers are faced with additional risks of contamination due to their direct exposure to infectious environments.

The vulnerability of such groups to external or internal distress emerges from their lower access to information, poor connections to health facilities or service delivery mechanisms, thinner social networks, as well as lack of proper social safety nets. Such factors put these groups at a greater disadvantage in accessing timely and accessibly formatted information, care, and support. Additionally, the urban poor are disadvantaged in terms of isolating infected individuals and maintaining “social distance” in the very small dwellings, overcrowded spaces in urban settlements and boarding houses/hostels where they live, with often with very poor sanitation. Additionally, access to clean water for cooking and hygiene, which is critical to preventing the spread of the virus, is often limited in low-income households. Getting sick is also extremely costly in terms of lost income, and out-of-pocket health expenses.

Vulnerable groups targeted for the vaccination program

Critically, in the immediate short term, those with cognitive disabilities and intellectual impairment often lack access to targeted and plain language materials on life saving prevention measures. Shifts to online learning and work, without universal design features, can raise equity gaps for persons with disabilities and children with disabilities. Moreover, those who rely on paid caregivers are at a risk of disrupted care and support, conversely more susceptible to infection. Persons with disabilities who are institutionalized are at risk of being exposed to COVID-19 at such facilities. Additionally, evidence shows that persons with disabilities, particularly women and girls, experience greater rates of violence and abuse. With increased stress, family confinement, and isolation, there is a heightened risk of gender-based violence.

As per the NDVP which identifies prioritized groups who will be targeted for COVID-19 vaccines (following the WHO concept for fair access and equitable allocation of COVID-19 health products, and the WHO Strategic Advisory Group of Experts (SAGE) values framework for the allocation and prioritization of COVID-19 vaccination) the vaccination program which started in January 2021 has rolled out as planned and targeted those groups bearing the highest risk from COVID 19 first. The priority identification of target groups has been done based on existing epidemiology in Sri Lanka at the time of submitting the COVAX-AMC, COVAX application for COVID-19 vaccines and at the time of developing NDVP in early January 2021. The NDVP projects number of people in each priority immunization category, as summarized in the tables below. In light of differing supply timelines, the following supply scenarios has been considered in determining priority populations.

Table 6: Prioritized population proportions for COVID-19 vaccination

Category	Number	Population proportion%	Cumulative proportion%
Frontline health workers	155,000	0.69	0.69
Front line military and police	127,500	0.56	1.25
Above 60	3,159,800	14.0	15.25
International travelers and outbound migrant workers/ students, other vulnerable, cleaning, ports, essential, immune compromised	225,700	1.0	16.25
Working population 50- 59 with comorbidities	1,241,350	5.5	21.75
Working population 40 – 49 with co morbidities	1,151,070	5.1	26.85
Working population 30 – 39 with co morbidities	835,090	3.7	30.55
Working population 50- 59 without co morbidities	1,286,490	5.7	36.25
Working population 40 – 49 without co morbidities	1,828,170	8.1	44.35
Working population 30 – 39 without co morbidities	1,218,780	5.4	49.75
Other eligible	2,313,050	10.25	60.00

4.2.8 Land and Cultural Resources

Land resources

Sri Lanka is one of the most densely populated countries in the world, and therefore much of the land has been put into productive use. At present, 82.25 per cent of the country's land is owned by the State while only 17.75 per cent is privately owned, reflecting a history of centralised control over land. On the one hand, there are a large number of fragmented agricultural lands small in size and generally unproductive, and on the other, there is a large extent of agricultural land in plantations areas, a significant proportion of which is underutilized. Forests cover approximately 29.7% (1.95m ha) of the land area, with dense forest amounting to 21.88% (1.44m ha).

Table 7: Land Use Patterns

Land Type	Land Use	Hectares (Year 2000)	% Area
Urban Land	Urban Land/Settlement	27,830	0.40%
Agriculture	Homesteads (associated non-agricultural land)	943,495	14.40%
	Horticulture Plantation	1,779,245	27.10%
Crop Land	Paddy	912,927	13.90%
	Other Crop Land	176,218	2.70%
Forest Land	Dense Forest	1,070,555	16.30%
	Open Forest	439,050	6.70%
	Forest Plantation	93,910	1.40%
Range Land	Scrub land	590,180	9.00%
	Grass land	97,274	1.50%
Wetland		55,698	0.80%
Barren Land		93,810	1.40%
Water		285,778	4.40%
Unclassified		124	0%
Total		6,566,094	100 %

During the last few decades' natural disasters have been on the increase because of improper land uses in. For example, human settlement and cultivation of annual crops on steeply sloping lands have resulted in rapid soil erosion, landslides and the silting of rivers, waterways and reservoirs, thereby reducing their capacity and causing floods. Furthermore, the productivity of fertile lands has reduced due to improper land use—nearly 44% of agricultural lands is known to have been subjected to land degradation.

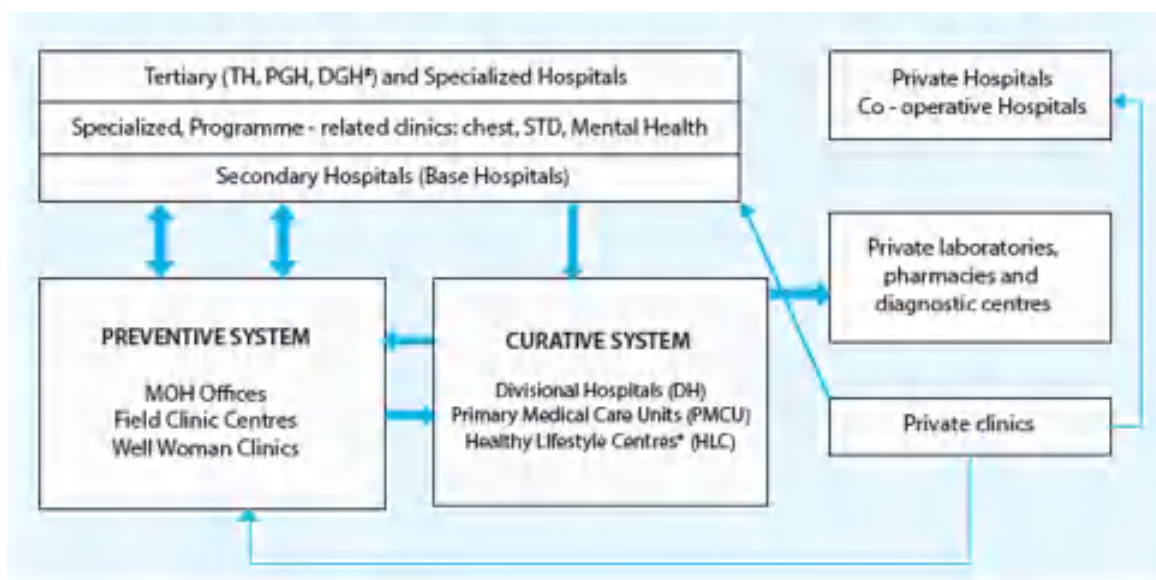
Cultural Resources

The culture of Sri Lanka mixes modern elements with traditional aspects and is known for its regional diversity. Sri Lankan culture has long been influenced by the heritage of Theravada Buddhism passed on from India, and the religion's legacy is particularly strong in Sri Lanka's southern and central regions. The history of colonial occupation has also left a mark on Sri Lanka's identity, with Portuguese, Dutch, and British elements having intermingled with various traditional facets of Sri Lankan culture. The architecture of ancient Sri Lanka displays a rich diversity, varying in form and architectural style from the Anuradhapura Kingdom (377 BC–1017) through the Kingdom of Kandy (1469–1815). The country has a rich artistic tradition, with distinct creative forms that encompass music, dance, and the visual arts. Sri Lankan culture is internationally associated with cricket, a distinct cuisine, an indigenous holistic medicine practice, religious iconography such as the Buddhist flag, and exports such as tea, cinnamon, and gemstones, as well as a robust tourism industry.

4.3 OVERVIEW OF SRI LANKA'S HEALTH SECTOR

Sri Lanka has a well-established free and universal public health care system. The following diagram illustrates the present health care delivery system. Public health care providers are classified in three sub-systems: preventive primary healthcare (PHC) providers, curative PHC providers and referral hospitals.

Figure 7: Present Health care delivery system



4.3.1 Preventive Public Health Care (PHC) Providers

Preventive PHC services are structured in Medical Offices of Health (MOH), covering well-defined areas that coincide with the politico-administrative division of the country, at the level of Divisional Secretariat. Each MOH serves a population of approximately 60,000-100,000 people. The core team of the MOH is composed of MOH as the team leader (with Additional AMOH), Public Health Nursing Sister (PHNS), Supervising Public Health Inspector (SPHI) & Supervising Public Health Midwife (SPHM) as middle level supervising officers, and Public Health Midwife (PHM) & Public Health Inspector (PHI) as the grassroots-level community workers. This team is complemented by the Program Planning Assistant (PPA), Health Management Assistant (HMA), School Dental Therapist (SDT) and other field officers.

The MOH provide the whole range of reproductive, maternal, newborn, child and adolescent health services as well as other preventive services such as immunization services, control and prevention of communicable diseases, oral health, environmental health, and occupational health. Patients are referred when necessary to secondary level hospitals. These services are provided by the MOH through an extensive network of field clinics and a number of other settings. In addition, domiciliary care is provided for services such as antenatal, postnatal, family planning, infant, and childcare. Users of the different services (e.g., antenatal care) are required to register with the specific provider (e.g., a public health midwife) assigned to their area of residence. This sub-system also delivers the school health programme and the newly established adolescent-friendly services. It also includes dental health services, delivered both at schools and clinics.

The MOH conducts Well Woman Clinics (WWC), which deliver health education, screening services for cervical and breast cancers, and selected NCDs such as Hypertension and Diabetes. The Medical Officer of Health (MOH) is in charge of coordinating and implementing a range of public health interventions for the prevention and control of communicable diseases, including outbreak response, disease surveillance for mandatory notifiable diseases, vector control initiatives, to tracking of contacts of new TB cases. Implementation of National Immunization Programme through life course vaccination for the elimination and eradication of vaccine preventable diseases is carried out as a main strategy for communicable disease prevention. Other tasks include environmental health, control of water safety, or health inspections to ensure food safety and reduction of occupational health hazards.

4.3.2 Curative Public Health Care Services

There is an extensive network of Primary Medical Care Institutions devoted to the provision of curative services located throughout the country. These mainly comprise of the following types of facilities:

- **Primary Medical Care Units (PMCU):** The PMCUs, previously known as Central Dispensaries, are relatively basic facilities devoted to outpatient care. Services provided include OPD consultations, wound dressings and injections, and drug dispensing. Some PMCUs have dental services and most do not have laboratory services. PMCUs are typically staffed by 1-2 Medical Officers (MOs) or Assistant Medical Officers (AMO), public health nursing officer as well as a drug dispenser. Most PMCU host MOH field clinic centres, where family planning, maternal care and immunization are provided by MOH team with support of the facility team.
- **Divisional Hospitals (DH):** DHs are, in essence, PMCUs with inpatient capacity. The number of MOs in DH is higher depending on the category (B or C) because they provide round-the-clock service, and usually have a small nursing staff. Some may have laboratory, and even a Public Health Laboratory Technician able to perform microscopy examinations. Some special clinics are usually conducted at this level, such as NCD or mental health clinics. The premises are often utilised as field clinics for MOH and immunisation activities, but the conduct of the clinic comes under the purview of the MOH.
- **Outpatient departments** of secondary and tertiary care institutions (other than specialized hospitals)

In addition, PMCU and DH host Healthy Lifestyle Centres (HLC), functional (and sometimes physical) units for the screening of selected NCD (e.g. Hypertension and Diabetes), including health education. HLC have portable devices for the determination of blood sugar. Differently from the government preventive services, PMCU/DH do not cover specific territories, administrative divisions or population. Users can choose freely which provider of curative care –from PMCU to tertiary care facilities—they attend when sick.

4.3.3 Referral Facilities

There is a variety of referral facilities, from first-level referral hospitals to specialized units. Some facilities, such as STD clinics, do not include inpatient care, but the provision of specialized services linked to specific conditions or programs.

Secondary care hospitals

Divisional Hospitals type A and Base hospitals (BH) of different levels (A, B) are secondary level institutions that provide at least the four main specialties of Internal Medicine, Paediatrics, Obstetrics and Gynaecology, and Surgery, including theatre and blood bank, delivered by medical consultants with the assistance of medical officers. These hospitals may provide additional services, depending on resource availability. They also have support services, such as laboratory, radiology and pharmacy, among other services. BH are the first level of referral for public health care institutions for both preventive and curative care. However, referred patients can still choose which hospital they will attend. Majority of BH are funded and managed by provincial and district health authorities. In Sri Lanka, there are 27 Base hospitals of Type A and 45 Base Hospitals of Type B (*MOH website*).

Tertiary care hospitals

Teaching Hospitals, Provincial General Hospitals and District General Hospitals provide secondary and tertiary care services, which ranges according to their location and availability of staff and equipment. Tertiary care hospitals are funded and managed centrally by the Ministry of Health. These facilities are staffed with medical consultants, grade medical officers, nursing officers, professions supplementary to medicine and paramedics. A few, highly specialized tertiary hospitals –e.g., Maharagama Cancer (Apeksha) Hospital, Lady Ridgeway or Sirimavo Bandaranaike paediatric hospitals, De Soysa Hospital for women, Castle Street Hospital for women, Eye hospital, mental hospital —play a role as centres of excellence. In addition to the medical clinics for the attention of referred cases and managed by appointment, all secondary and tertiary hospitals run a PHC-level, walk-in OPD service. As mentioned previously, patients can choose their provider in every occasion they seek care. Sri Lanka’s public health care sector has 2 National hospitals, 22 Teaching Hospitals, 2 Provincial General Hospitals, and 19 District General Hospitals (*MOH website*).

Special clinics

Some public health programs (e.g. Tuberculosis, STD/HIV/AIDS) run their own clinics, usually at district level. Staffed by trained or specialized MOs, these clinics are involved in the final diagnosis of the relevant conditions (e.g., diagnostics of tuberculosis or sexually transmitted diseases are only final when assessed at a Chest or STD clinic) and the management and follow up of the patients. Some of these programs provide services intermittently at district or BH level, by deploying their consultants –and drugs and supplies—to these “branch clinics”. This is the case for chest, STD and mental health clinics, for example.

4.3.4 Emergency care

The emergency care services cover both the management of emergency cases at the health facilities, and the coordination and management of massive emergencies, either man-made or natural, at the national level. Sri Lanka suffers from frequent natural hazards including floods, landslides, cyclones, droughts, windstorms, coastal erosion, and others. The MoH has set up an Emergency Operations Centre, in charge of coordinating information sharing as well as the transfer of resources to emergency sites. All hospitals, from Divisional Hospital upwards, are to provide emergency services of increasing level of complexity. Most secondary and tertiary hospitals, and some DH, operate Emergency Treatment Units (ETU), in many cases complemented with Preliminary Care Units (PCU) or triage units. There are public and private ambulance services. The “1990” publicly-managed ambulance (pre hospital) service is expected to cover the whole country in the future.

4.3.5 Private health care providers

There are three main groups of providers in the private sector:

- Hospitals, with profile and standards of quality of care comparable to those of the public system, although with large differences in terms of waiting time and other facilities.
- Clinics, either solo or group practices, providing general or specialized care. Both clinics and hospitals rely heavily on MOs and Consultants working in the public sector and who are allowed dual practice. According to the Census of Private, Cooperative and Estate Hospitals 2013, there were at least 1,900 public sector doctors working part-time at private facilities. Although the main users of the private sector are the better off population, even poor people use these services because of convenient hours, shorter waiting times, availability of diagnostic tests, and perceived quality.
- Private institutions providing diagnostic services (e.g. lab, radiology), as well as private pharmacies.

4.3.6 Health Sector Administration

Each province is headed by a Provincial Director of Health for health administration. Considering health, the sub national administrative levels below the Provinces are considered as health districts, in which are comprised of 26 health districts . Altogether 24 districts are compatible with same as government administrative districts and only the District of Ampara is divided into Ampara and Kalmunai. Each health district is headed by a Regional Director of Health Services for medical administration of the district.

Regional Epidemiologists based at district levels provide necessary technical expertise to the primary health care staff working at the sub national level. Districts are considered as the main operational level for public health administration. The Regional Epidemiologist is responsible for the implementation of the National Immunization Programme (NIP) at district level for the prevention of communicable diseases. The country has public health specialists at the district and provincial levels as well as Consultant Community Physicians for overall technical guidance for key public health programmes.

Each district is further divided into Medical Officer of Health (MOH) areas in which primary field health staff is mainly based and provide most primary field level health care services to the population. This level is considered as the division for the country and the secondary sub national level.

Curative care institutions at each level provide high quality curative care for patients. Specialists from different specialties are available at easy access to the population at all levels based on hospital categorization and closely work with public health care sector in communicable disease control and prevention in mandatory notifications of communicable diseases for early outbreak detection, providing vaccination services and notifications of Adverse Events Following Immunization (AEFI) in addition to the curative care.

4.3.7 Indigenous systems of health care

According to the MoH Ayurveda Department, there are almost 20,000 Ayurveda physicians registered in the Ayurveda Medical Council, as well as 8,000 traditional Medical Practitioners. Ayurveda practitioners are part of both public and private health sectors. In the public sector there are more than 500 institutions, with over 2,000 beds. Information from 2010 reports substantial activity in the public Ayurveda sector, of over 3 million outpatient consultations and more than 40,000 hospital admissions. There is no information on the activity performed by the private Ayurveda sector.

4.3.8 Service Availability

The following table present a summary of level of service provided by the different health care facilities.

Table 8: Summary of the level of service provided by difference healthcare facilities

Service/Device/Test	Tertiary Hospital	Base Hospital	Divisional Hospital	PMCU	MOH	Private Hospital
Diagnostic						
Full Blood Count	98%	93%	11%			72%
X-ray	95%	79%				
Ultrasound	95%	90%				75%
HbA1c	24%					
Glucometer	78%	81%	75%	61%	75%	79%
Surgical services						
Suturing	97%	93%				78%
Abscess incision	100%	90%				77%
Dilation & Curettage	79%	67%				62%
Hernia repair (elective)	87%	73%				68%
Closed repair of fracture	85%	60%				54%
Reproductive, Maternal, Newborn, Child and Adolescent Health						
FP-IUD insertion	100%	87%	52%*	18%*	97%	53%
Antenatal Care	100%	89%	90%*	65%*	100%	65%
Delivery Care	100%	100%	82%			56%
Corticosteroids in pre-term	100%	85%	26%			38%
BEmONC	100%	67%				34%
CEmONC	100%	62%				33%
Routine Immunization	72%	68%	66%*	46%*	100%	24%
Sick Child	100%	100%	89%	83%	100%	73%
Malnutrition Diag & Mngt	100%	97%	79%*	76%*	100%	59%
Adolescent health service#	58%	62%	38%*	35%*	82%	29%
Communicable diseases						
TB diagnostic (microscope)	91%	92%	25%	1%		48%
Dengue lab diag (FBC)	91%	70%	12%			
Non-Communicable Diseases						
Diabetes screening	100%	100%	91%	91%		96%
Screening retinopathy	94%	80%	41%	16%		48%
Cardiovascular Risk Assessment	56%	60%	63%	68%		7%
CVD management	100%	99%	56%			39%
COPD diagnostic & mangt	100%	99%	90%	80%		81%
Clinical oral examination	97%	92%	69%	43%	53%	55%
Clinical Breast exam.	100%	87%	63%*	62%*	96%	69%
Cervical Cancer screening	97%	63%		23%*	100%	54%
Mental Health (OPD)	97%	95%	70%			64%
Physiotherapy	100%	74%				64%

4.4 COVID-19 IN SRI LANKA

4.4.1 Snapshot of COVID-19 Cases and Services

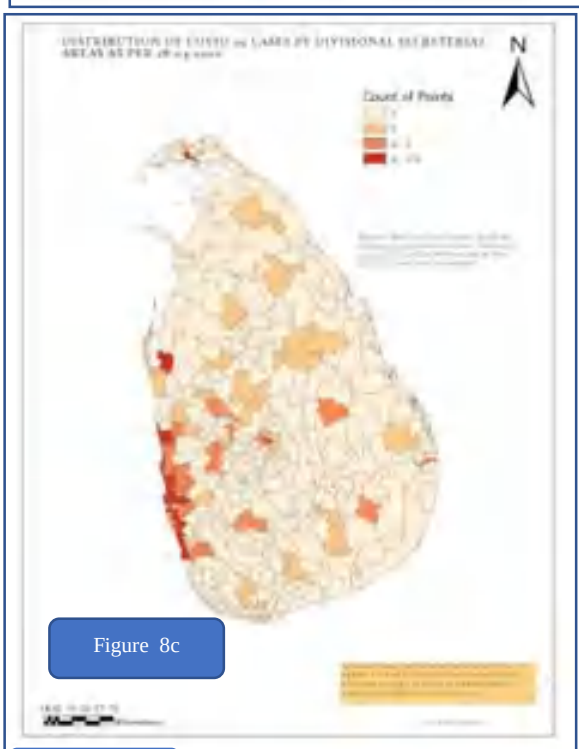


Table 8.1

Total Number Confirmed	705*
Total Number Recovered	182
Total Number of Deaths	7
Confirmed and hospitalized - today 10am	516**
Suspected and hospitalized - today 10am	176 [#]

Figure 8: Snapshot of COVID-19 cases and services as of 30th April 2020

Figure 8a: Total number of COVID confirmed cases as of April 30th 2020; Figure 8b: Total number of COVID-19 deaths as of April 30th 2020; Figure 8c: Distribution of COVID cases in Sri Lanka as of 28th April 2020 showing the high risk areas; Figure 8d: Quarantine and Treatment Facilities for COVID in the island and Table 8.1: Summary of COVID cases (These figures have been obtained from the MOH COVID-19 website)

In light of the COVID pandemic, the MOH has designated several health care facilities as centers of treatment for suspected and confirmed COVID-19 patients. These include:

Western Province	National Institute for infectious Diseases, Colombo East Base Hospital, Homagama Base Hospital, Welisara Navy Hospital, Minuwangoda Base Hospital in the Western Province, Negombo General Hospital, Gampaha General Hospital, Colombo National Hospital, Ragama Teaching Hospital, Lady Ridgeway hospital, De Zoysa Maternity Hospital
Central Province	Kandy General Hospital
Northern Province	Iranavila Hospital
Eastern Province	Kaththankudy Base Hospital
Southern Province	Karapitiya Teaching Hospital
North Western Province	Kurunegala Teaching Hospital
North Central Province	Anuradhapura Teaching Hospital
Uva Province	Badulla General Hospital
Sabaragamuwa Province	Ratnapura Teaching Hospital

The taskforce on COVID -19, which is a civil body headed by the Commander of the Army and meetings are co-chaired by the Commander of the Army and the Director General of Health Services also sort the support of the military to establish and operate quarantine facilities and recently enlisted the support of the army medical team to supplement the national vaccination program.

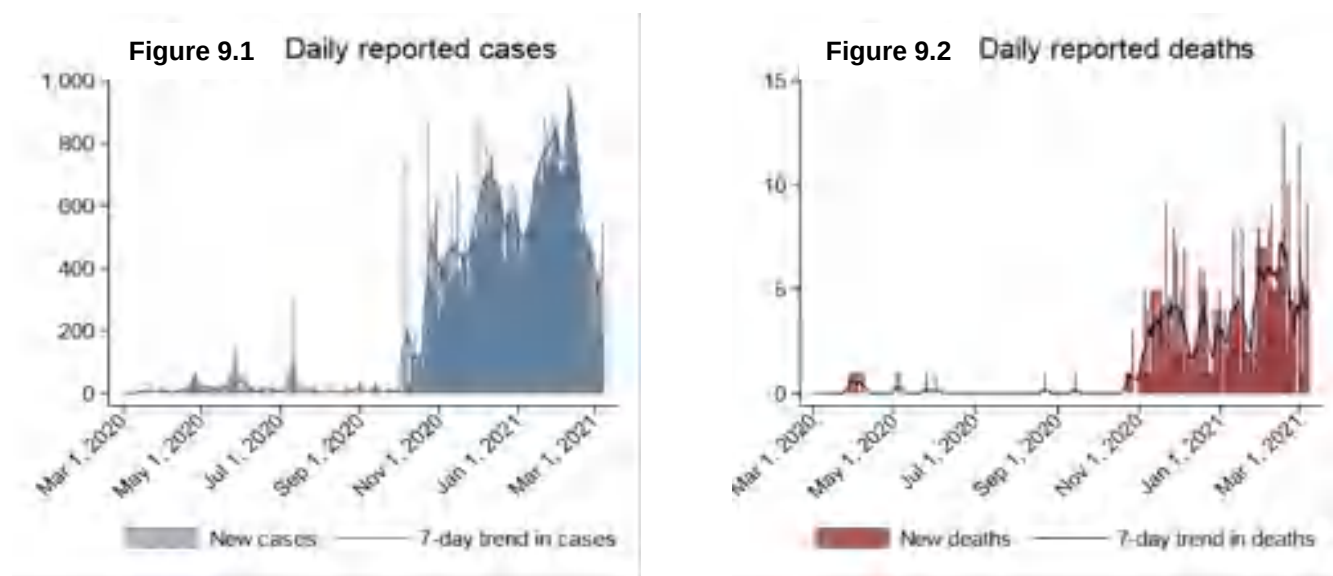
4.4.2 Latest COVID-19 situation in the country

April 2021

The second wave of the pandemic began in October 2020, with the detection of a major cluster in a garment factory in the outskirts of Colombo. Despite the significantly wider spread associated with the second wave, there has not been an exponential increase in the number of cases. Daily case numbers have fluctuated between 500-800 since October 2020 and began to decline since late February (see Figure 1). Some restrictive measures including the closure of schools have been re-introduced, and area specific isolation has been imposed in selected areas based on risk profiles, infection rates, and the detection of active cases. As of April 6, 2021, a total of 93,690 confirmed COVID-19 cases have been reported in Sri Lanka; 2,394 of these are active cases; and 90,708 patients have recovered and been discharged from hospitals. The country has reported 588 deaths from COVID-19 to date. Sri Lanka's recovery rate is at 96.8 percent, and the fatality rate is 0.63 percent. In line with the country's management strategy, all COVID positive patients receive institutionalized care at treatment centers, while more severe cases are being treated at hospitals.

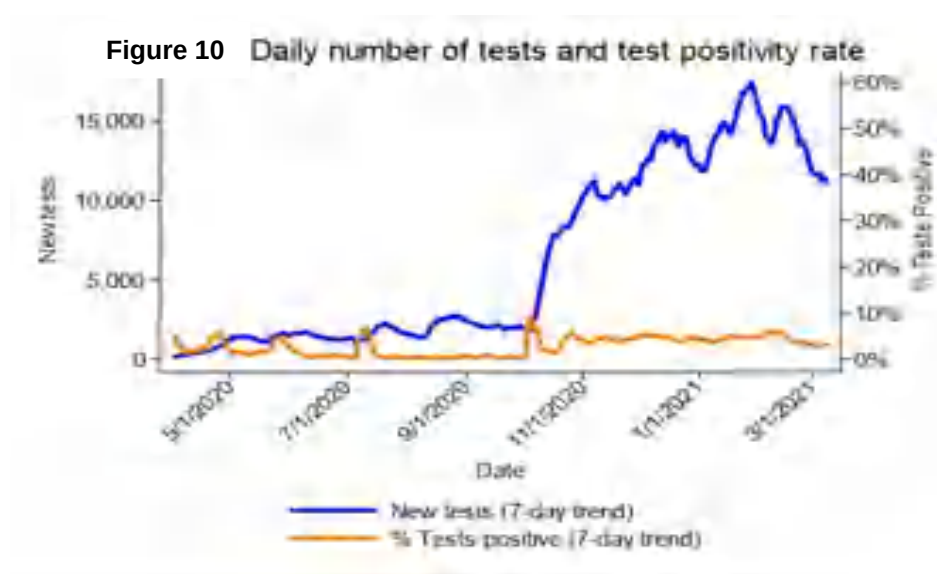
Approximately 10,000-15,000 PCR tests have been conducted per day with a test positivity rate of around 3-5 percent since October 2020 (see Figure 2).

Figure 9: Number of COVID-19 Cases and Deaths Reported in Sri Lanka



Source: Official government data, collated by Johns Hopkins University

Figure 10: : COVID-19 Testing and Percent Positive in Sri Lanka



August 2021

- At present, Sri Lanka is experiencing the 3rd wave of the COVID-19 pandemic with the increased island wide prevalence of the Delta variant. The third wave came with a massive surge in numbers from April to July (attributable to the Alpha variant) and led to a 30-day lockdown in May/June. Case counts have been on the rise since April 2021. During August 2021, an average of 200 deaths were recorded per day, and deaths per million population was at 9.20. With growing case numbers and COVID-19 deaths being at an all-time high, the country has been on an island-wide lockdown since 20th August 2021. As of 31st August, the country has reported a total of 440,302 cases and 9,185 deaths from COVID-19; 56,961 cases were active while 383,341 patients had recovered. Sri Lanka's recovery rate is around 82 percent, and the case fatality rate is over 2 percent. As of August 2021, approximately 15,000-20,000 PCR tests per day are being conducted. With the spread of the Delta variant and the surge in the number of CoVID-19 cases most hospitals are over capacitated and overburdened; attributing to these factors country's CoVID-19 management strategy is now permitting home-based care of CoVID-19 patients showing mild to moderate symptoms.
- Further at present an increase in infection and mortality rate is observed amongst pregnant women and young children due to the high prevalence and spread of the delta variant. As of September 2, 2021, 700 COVID-19 cases have been identified among pregnant women with 35 deaths.

4.4.3 National Institute for Infectious Diseases

The National Institute of Infectious Diseases (NIID), previously known as the Infectious Diseases Hospital (IDH), is the only designated quarantine hospital and the only specialized hospital for communicable diseases in Sri Lanka. The NIID plays a key role in the treatment of COVID-19 patients in the country and hence needs to be highlighted. This hospital was established more than 160 years ago during the British colonial period. Currently, it has 110 beds including one dedicated dengue ward which consists of 40 beds in male and female units. There are 453 medical and nursing staff and supporting health workers providing health services round the clock.

In 2017, Sri Lanka had a public health emergency with a record rise in the number of confirmed dengue cases. The NIID became a centre of excellence for dengue treatment and in response to the rising numbers the hospital was equipped with improved facilities and drug supplies. The NIID has been very successful in treating the dengue epidemic and has reported very low levels of case fatalities.

In response to the increasing dengue caseloads, the NIID was affiliated with three peripheral hospitals, namely District Hospitals Thalangama, Piliyandala and Wethara. Clinical staff and other facilities were established in these hospitals by Ministry of Health. Extra ambulances were deployed for inter-hospital patient transport. A communication network was established which enabled continuous monitoring of supplies and to manage technical issues, and complicated patients were transferred to NIID for further management. The NIIDs enhanced operational capacity and networking has played a critical role in treating COVID patients during the pandemic. However, the capacity of NIID need to be strengthened to respond

and sustain sufficient services to patients which it has done in response to previous epidemics and as well as the ongoing one.³¹

4.5 OVERVIEW OF THE HEALTH CARE WASTE MANAGEMENT IN THE PUBLIC SECTOR HEALTH FACILITIES

The project will support a wide ranging set of interventions aimed at strengthening the capacity of the health system to contain, control and respond to the COVID-19 crisis including COVID-19 vaccine deployment. While this will include civil works for renovation/expansion and construction of medical facilities, they are not expected to be associated with significant environment and social (E&S) impacts and the vaccination centers will be limited to existing facilities and their footprints (e.g., while setting up of isolation wards, IDH facilities will take place in existing hospital land and other public land in typically built up areas, vaccination centres will be set up in MoH clinics and identified community centres as mobile pop up clinics).

However, two of the most potent issues relevant to the project are (i) health care waste management, and (ii) occupational health and safety of health workers. While the project may not finance the operation of the COVID 19 Treatment facilities, the AF for the vaccination program will support service delivery costs to support clinical and non-clinical staff with provision of hazard pay and overtime allowances to the extent that the vaccination program is operational. The parent project as well as the AF will make available assistance to improve strategies for HCWM.

In addition, the project will need to ensure adequate systems are in place for sound health care waste (HCW) management and infection control during COVID-19 vaccine deployment phase and the operational phase of improved hospital facilities. Implementing adequate systems to safely manage HCW generated within the HCF is the only way to control and reduce risks of accidental injury and disease transmission inside a hospital and to ensure health of hospital staff and the population are protected, especially in the face of a highly contagious disease such as the COVID 19. Thus, health care waste management should be considered a part of hospital hygiene control and hence it is imperative that each HCF supported under the project implements adequate measures to (i) safely manage and dispose HCW and (ii) enhance occupation health and safety from hospital associated infections.



At present, Sri Lanka has limited capacity for the overall solid waste management, however, the country has made noteworthy progress in implementing a national framework for the safe management of health care waste in the country. Several critical initiatives aimed at implementing a standardized system has been taken in the last decade and a half and they include: (i) drafting of a national policy for HCWM, (ii) development of national guidelines, color codes and code of hygiene HCFs, (iii) drafting of a National Action Plan (NAP),

³¹ Response of the National Institute of Infectious Diseases, Sri Lanka to an unexpected dengue epidemic in 2017 D Rathnayake1 , A Wijewickrama2 , K Aluthge3 Ceylon Medical Journal 2018; 63: 108-112

(iv) consolidation of National Environmental Act by gazetting HCW disposal as a prescribed activity requiring an Environmental Protection License (EPL), (v) creation of a budget line for HCWM in the national budget for health services. Implementation of the NAP has been selective but HCWM systems have been successfully implemented in the public hospitals within Greater Colombo and several major provincial hospitals.

An environmental audit that was conducted in 2017 by the Ministry of Health under the World Bank funded Second Health Sector Development Project observed a steady increase in implementation of safe procedures for HCWM within secondary and tertiary HCFs. The audit reports that health care waste segregation in these facilities according to the national color code is close to 100%. It indicated that a high percentage of hospitals practice environmentally friendly disposal and possess a valid EPL and SWL. The audit also indicated that a majority of the secondary and tertiary health institutions in the country have equipment such as autoclaves, metamizors and incinerators for the disinfection and disposal of HCW which the project can use while in parallel project funds will be invested in further augmenting the capacity via procurement of necessary equipment and training.

Further to this documented evidence from 2017, in preparation of this ESMF, the Directorate of Environment, Occupational Health and Food Safety of the Ministry of Health conducted a rapid survey of 90 hospitals across all 9 provinces in Sri Lanka to take a quick stock taking of the HCW management practices and equipment available within the network of tertiary and secondary care hospitals. The sample included the following health care facilities spread across all nine provinces of the country.

Table 9: Rapid survey summary of the type of healthcare facility

Level of HCF	Type of facility	Number in the sample	Geographic coverage
Secondary	Base Hospitals	64	All nine provinces
Tertiary	National Hospital	2	All nine provinces
	Teaching Hospitals	4	
	Specialist Referral Facilities	8	
	Provincial General Hospitals	1	
	District General Hospitals	13	

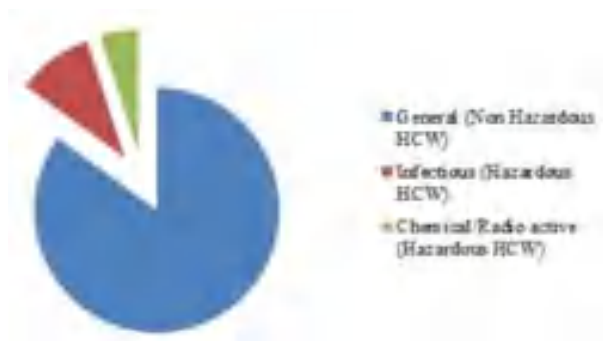
Since the rapid survey was done in March 2020 in support of the preparation of the original ESMF, the tentative quantities of HCW generation indicated related largely to the pre-COVID era. Unfortunately, there is no proper information on additional waste quantities that has been generated from the pandemic.

Annex 3 presents a complete summary of this rapid survey of 90 hospitals.

4.5.1 Production of Solid HCW

The production of hazardous HCW per day varies depending on the level of health care facility, services offered, and the population characteristics of the catchment area served. Typically, about 75% to 90% of the waste produced by health care facilities is considered as “non-hazardous” or “general healthcare waste”. It comes mostly from administrative, kitchen and housekeeping functions at health-care facilities. The

remaining 10–25% of health-care waste is regarded as “hazardous” and cause variety of environmental and health risks, which need sound management. Hazardous Health Care Waste includes:



- Sharps waste–Used/unused sharps such as needles, infusion sets, pipettes knives, blades and broken glasses.
- General infectious waste –Waste that contain pathogens such as blood, body fluids, laboratory cultures, microbiological stocks, patient excreta and pus from infected wounds.
- Pathological waste – consists of human tissues, organs, fluids body parts, fetuses, placentas, and unused blood products.
- Pharmaceutical waste, cytotoxic waste – items contaminated by expired pharmaceuticals cytotoxic, genotoxic pharmaceuticals
- Chemical waste – Waste containing chemical substances such as laboratory reagents, solvents, X-ray film developers with heavy metals, batteries, broken thermometers and BP apparatus.
- Radioactive waste – Waste containing radioactive substances, urine and excreta from patients receiving radioactive treatment/investigations.

The following table presents the type and quantity of HCW generated by different facilities which is essential in assessing the risk and planning risk mitigation.

Table 10: Type and quantity of HCW generated by different facilities

Type of HCW	Services Offered	HCW			
		Sharps	General Infectious waste	Anatomical waste	General Waste
National Hospitals		100 Kg/day	1000 – 2000 Kg/day	2-3 Kg/day	1500 – 3000Kg/day
Teaching Hospitals		100 – 500 Kg/day	500 – 1000 Kg/day	20 – 30 Kg/day	200 – 1400/day
Provincial General Hospitals		20 – 25 Kg/day	100 – 800 Kg/day	-	-
Specialized referral facilities	Eye care Pediatric care Maternity care				

District General Hospitals		10-45 Kg/day	130 -800Kg/day	-	-
Base Hospitals		2 – 25 Kg/day	5 – 300 Kg	-	-

NOTE 1: The values given above are largely **indicative** and has been approximated based on the qualitative survey conducted for 90 facilities. In the attempt to provide average figures/ranges several variances have been generalized and hence, these values aim to paint a general trend of HCW generation in the hierarchy of HCFs in Sri Lanka. To be able to arrive at better estimates, the exact quantities must be calculated based on a waste audit. Also, the amount of waste generated varies widely based on the (i) bed strength of the hospital and average bed occupancy rate (iii) population in the catchment area served (iv) and the number of OPD patients received per day.

NOTE 2: The quantities indicated above and in Annex 3 may not be high in accuracy as currently HCW weight quantification and documentation is not standardized in most of the hospitals. The staff typically uses the method of approximation in giving these numbers.

NOTE 3: General infectious waste includes that consists of cotton swabs, wound dressings, plasters, bandage, gloves etc; anatomical waste includes placentas and other surgically removed body parts; sharps include injections, surgical blades, cannulas and general waste that includes food waste, plastics, glass and paper.

- National hospitals and Teaching Hospitals produce the largest quantity of HCW as these are apex hospitals that offer a large repertoire of medical and surgical services and typically have high bed strength as well as high bed occupancy rates (the two national hospitals in Colombo and Kandy included in the survey have approximately 3200 and 2500 bed strength and a high occupancy rate of over 80%).
- Provincial hospitals, specialized referral facilities and District General Hospitals produce a similar range of infectious waste which is less in quantity compared to National and Teaching hospitals.
- Base hospitals produce a relatively lesser quantity of HCW reflecting smaller capacities in terms of the medical operation, number of patients served, and the lesser range of specialist care services offered. A wide variance in the generation of sharps and general infectious waste between the Base Hospitals surveyed is noted (see Annex 3). The reasons for this include:
 - Differences in bed capacity and average bed occupancy rates. For example, the BH in Mahiyangana in the Uva Province has a bed capacity of 365 and a very high average occupancy rate of 86% indicating preference of patients to seek treatment in the facility. It produces infectious waste of 225 Kg/day consisting of sharps and general infectious waste. Similar patterns are seen in BH in other important clusters such as Kalutara, Negombo and Badulla. The BH in Kalpitiya in the North Western Province is a small facility with a bed capacity of 64 and an average occupancy range of 38%. The hospital produces an approximate 2.5 Kg of infectious waste a day.
 - Human error involved in the approximation of HCW generation, especially given this was a rapid survey and not a proper waste audit.
 - Differences in the type of services offered – some BH may offer surgical interventions while others may not. Also, some BH may host various clinics for preventive care which results in the generation of higher quantities of sharp waste.

Accurate data on waste production is essential as it forms the basis on which suitable HCWM strategies are identified. This is especially so in times of pandemics such as what is being experienced currently as quick decisions need to be made before waste exceeds system capacity. As such it is important for medical

institutions to collect data on hazardous health care waste generation for effective implementation of a HCWM program.

4.5.2 Waste Segregation

Waste segregation is key to effective HCW management as it minimizes the volume of hazardous waste to be safely disposed of. Separating hazardous health care waste from general waste is fundamental to minimizing the quantity of HCW that requires prior treatment and/or special disposal. In Sri Lanka, a good attempt is made in all the HCFs to segregate waste at the source to a minimum of three categories into standardized color-coded containers – as general, infectious and sharps – which is a very positive aspect. This



observation is consistent with the environmental audit that was carried out by the MOH in 2017 under the World Bank Funded Second Health Sector Project. It is noted that even in the Primary Health Care sector, where limited case types are handled, a good attempt is made in all the HCFs to segregate waste according to its hazardous nature. However, this is not entirely maintained during disposal and thus final disposal methods currently followed undermine efforts to segregate waste in wards, operation theaters, laboratories, OPDs and ETUs.

4.5.3 Waste Treatment Technologies and Disposal Options

The following table of treatment technologies used in Sri Lanka has been constructed from the survey responses. Where some HCF use more than one treatment technology and as such the total entries in the table exceeds the number of HCFs that responded to the survey.

Table 11: Waste Treatment Technologies used in Sri Lanka (survey responses)

Technology used	National Hospital	Tertiary Hospital	Specialized Facilities	Provincial General Hospital	District General Hospital	Base Hospital
Number of hospitals respondents to the survey	2	4	7	1	13	64
Removed from the analysis due to ambiguity in survey responses						2
Outsourced to Private sector and incinerated	2	3	7			2
Taken to other central facilities (another hospital with incinerator)					11	

facilities or a central incinerator facility)						
Incinerated on-site				1	8	29
Sterilized and neutralized onsite before handing over to private supplier or incineration		3	1	1	6	20
Open burning						9
Incinerator being installed						1
Incineration available but broken						2

Ref: The information in the table has been obtained from the rapid survey conducted in support of the this ESMF development

From the above table it is clear that Sri Lanka's health sector has made significant progress in creating treatment capacity for hazardous HCW in the center and provinces, compared to large-scale opening dumping and open burning which used to be the common method practiced just little under two decades ago. Many hospitals use one or two treatment methods, and the common technologies used are autoclaving and incineration.



Currently there is also a few private sector players who collect, store and incinerate clinical wastes collected from HCFs. Sisili Hanaro Encare Pvt Ltd is one such private sector company specializing in clinical waste management. The company was established in 2014 as Sri Lanka's first Tri-Partite agreement with MOH and Central Environmental Authority under the Ministry of Environment to establish a centralized clinical waste treatment facility and provide end to end solutions including storage, transport, incineration and conversion of residual ash in eco-friendly blocks (see the two images below). The treatment facility, located in Muturajawela to the north of Colombo, and is fixed with a complete flue gas treatment solution that cleans all emissions prior to discharge into the environment. The

operation is conducted with periodic environmental quality measurements such as air and wastewater and had a small landfill for landfilling ash from the incinerator. Encare is under contract by the government to collect and treat health care waste from hospitals in 4 provinces – Western, Central, Sabaragamuwa and Southern, which they have been doing through regular and uninterrupted clinical waste collection, treatment and disposal and thereby greatly reducing clinical waste being disposed of improperly from some of the largest hospitals in Sri Lanka. The COVID 19 treatment center in the country, the National Institute for Infectious Diseases, is also served by Encare Pvt Ltd using separate containers and trained teams wearing PPEs. The capacity of the central incinerator owned by Encare is considered adequate to handle additional

loads of clinical waste generated due to COVID-19 which they have been doing since the pandemic broke out in Sri Lanka.

Many Base Hospitals operate their own incinerators but information with regard to the type, make, capacity wasn't consistently provided in the rapid survey questionnaire. It is not clear if these small-scale incinerators are fixed with flue gas abatement systems and as such if air emissions are controlled and monitored. Sterilizing clinical waste prior to disposal via autoclave/metamizer seems an equally popular treatment option. In 2017, the MOH acquired several metamizers under an Australian bilateral grant to be installed across the country. Again, it is not clear from the survey responses what the final disposal option for sterilized clinical waste is as local authorities do not collect clinical waste from hospitals (unless the hospital mixes them with other general waste which is more in quantity). Hospitals also use sharp burners to destroy used sharps at the point of generation in clinics, wards. In a few facilities, open burning is carried out – by location these 9 facilities are within the less developed Northern and Eastern Province in very rural settings with a low waste output. As for pathological waste, burying in lined concrete pits and outsourcing to florists are the strategies used.



As for specific arrangements for COVID-19 waste, some of the tertiary care hospitals which are designated COVID 19 treatment centers have indicated that additional measures have been put in place. Other than stating that infectious waste is collected and disposed according to guidelines issued by the MOH for COVID 19 and training has been acquired from the NIID (such as adding TLC to the yellow bag and wearing proper PPEs), no specificities have been provided. However, the situation seems different in the secondary care Base Hospitals where readiness to handle extra loads of COVID waste seems inadequate.

As for vaccination clinics, the segregation and collection of discarded vials, used syringes and sharps, cotton swabs will take place as per recommended standard practice. Disposal of these HCW, of which considerable quantities would be expected to be generated, would need to be managed through the existing disposal options. In the Western Province, where the largest volume HCW from the vaccination drive would be produced, disposal would be taken care of by the private service provider who has recently expanded their incineration facility with necessary government approvals and air quality monitoring regimes. In the other provinces, this waste would need to be managed with the existing sterilization and incineration facilities until assistance is mobilized from the project to strengthen HCWM systems.

4.5.4 Production and treatment of liquid health care waste

Health care wastewater in the primary sector consists of (i) black water containing high concentrations of fecal matter, urine and toxic chemical with high potential for pollution and (ii) grey water containing discharge from washing, cooking, bathing, laundering with low potential for pollution. Sewage generated in HCFs is potentially hazardous and infectious as they carry pharmaceutical chemicals and disease-causing bacteria, viruses and parasites. Some of the larger Secondary and tertiary hospitals have sewerage treatment plants while in a majority of hospitals sewage is disposed of in septic tanks. There are many risks associated

with current sewage disposal practices in most of the hospitals (the ones without treatment and those with under capacity treatment), especially if septic tanks are not water tight, old and leaking or if the groundwater table in the area is naturally high, such as (i) contamination of local drinking water sources (ii) degradation of aquatic habitats and (iii) outbreaks of water-borne diseases. In addition, pharmaceuticals, detergents, antiseptics in wastewater may act as endocrine disruptors and antibiotics can breed antibiotic resistant pathogens once they are released in the environment without proper treatment. In most of the cases, the capacities of treatment plants have not been augmented to meet the requirements of expansion of hospital facilities. Mitigation measures for hospital sewage and wastewater is to implement a treatment system. The volumes of wastewater produced in secondary and tertiary hospitals are significant and the treatment options should be investigated during project implementation. Since laboratory services are available in tertiary HCFs and some of the secondary ones, blood and urine samples from patients generate large volumes of hazardous liquid infectious waste. Liquid waste treatment and disposal is an area that requires attention and investments.

4.5.5 Status with Environment Protection License/Schedule Waste License (EPL/SWL)

Of the 91 hospitals surveyed, 35% seem to have either an EPL or a SWL or both. While SWL covers hazardous waste specifically, the EPL covers the entire waste management system including general solid waste and liquid waste. According to the following table both national hospitals, 50% of teaching, referral and district general hospitals and about 35% of the base hospitals are covered under EPL/SWL or both. The Monaragala District General Hospital has been honored in the past with a Presidential Green Award Winner for its sound waste management system.

Table 12: Status of Environmental Protection License/Scheduled Waste License (survey responses)

Technology used	National Hospital	Tertiary Hospital Specialized Facilities	Provincial General Hospital	District General Hospital	Base Hospital
Number of hospitals respondents to the survey	2	11	1	13	64
EPL/SWL obtained	2	6	1	6	17
EPL/SWL applied		1		1	4
EPL/SWL not obtained		4		6	23
Not clear from the survey responses					20

In general, while there has been an incremental improvement in the HCWM practices in Secondary and tertiary hospitals over the last decade or so, the need for further improvement to address gaps and weaknesses exists. This is particularly so as the pandemic is certain to increase the quantities of HCW generated. For the western province where the pandemic has hit badly, this will be less of an issue given the ongoing contract the MOH has with a private service provides operating with a state of the art incinerator

and specially designed fleet of transport vehicles. The Project as an initiative to strengthen the HCW Management plans and strategies of the country and operationalize the country's HCWM initiatives, has included obtaining of EPL/SWL as an indicator in the Results Framework. The objective of this approach is that the hospitals that have not obtained an EPL/SWL thus far are encouraged to do so, thus streamlining the practices and processes of HCWM which includes, segregation, handling, collection, internal transportation, storage, treatment and final disposal.

4.5.6 Current Challenges with regard to HCWM

While the significant progress the health sector has made in terms of HCWM, the system is not without gaps and shortcoming. Continuous effort and investments are needed to carry forward these achievements until the country can reach a satisfactory status of safe health care waste management. Some of the known key gaps in HCWM include:

- None of the HCFs have a written HCWMP and an emergency plans, which is essential and forms the fundamental basis of planning and preparing
 - The Draft National Policy and National Guidelines for HCWM in Sri Lanka developed in 2001 by the Ministry of Health and Indigenous Medicine are two important documents to refer to in developing such plans. It provides clear a framework in directing HCFs in setting necessary procedures and standards to comply with the policy and legislative requirements. As per the Draft National Policy for HCWM of 2001, it is envisaged that the Provincial Directorate of Health Services (PDHS) will set up provincial and district HCWM plans presenting the overall strategy for HCWM at the province and district level.

The specific objectives of a HCWM plan for a HCF include the following; (i) Improving occupational health conditions for health care staff, caretakers and waste handlers (ii) Reducing the risk for people (patients, attendants, visitors, public, scavengers etc.) and animals ((stray dogs, cattle, pet, etc.) (iii) establishing and operating environmentally sound treatment and final disposal of hazardous medical waste

The HCWM plan should typically contain details on:

- An estimation of the quantities of hazardous and non-hazardous HCW generated
- Clear procedures and practices for the management of hazardous HCW from the point of generation to final disposal covering segregation, handling, collection, internal transportation, storage, treatment and final disposal. It should also include standardized waste collection time tables from each ward and department and locations
- Allocation of resources and provision of equipment required for the implementation of the HCW plan
- Strategy for raising awareness among hospital staff about risks associated with HCW (v) Annual training and capacity building programs for HCF staff members.
- Designation of duties and responsibilities for each of the different categories of HCF staff members who will generate or be involved in the management of HCW
- Contingency plans for the storage or disposal of hazardous HCW in the event of a breakdown of the treatment system
- HCW treatment equipment for HCF that do not have any currently, switching to better technology with controlled air emissions etc

- Ongoing training and capacity building for HCWM to hospital staff and waste handlers. Training to be delivered according to a specified training plan
- Proper use of PPEs in handling, transport, treatment and disposal of HCW
 - Overall, current practices of waste handling and disposal in almost every HCF, excepting to some extent in Tanamalwila, greatly compromises hospital hygiene and safety of health workers as well as the public. None of the HCFs have a HCWM plan or trained personnel or team with designated responsibilities. Special storage areas for HCW are available only in 4 HCFs in Moneragala, built by the World Bank funded HSDP II. Others do not have storage space and hence burning is done daily. Personal protective equipment is hardly worn by health workers who hand carry waste bins daily to the disposal site.
- Maintenance HCW treatment equipment and technical backstopping during frequent breakdowns

4.5.7 Addressing and mitigating the risks associated with HCWM.

As stated above Sri Lanka has a draft National policy and draft national guidelines on HCWM. The Project activities will encompass the preparation of site- specific HCWMPs aligned with the WHO recommendations, global standards and practices and the national policy and guideline on HCWM. Annex 8 of the ESMF provides a template for the preparation of site-specific Infection Control and Health Care Waste Management Plan (ICHCWMP). Further the ESMF provides specific guidance and protocols on developing site-specific ICHCWMPs taking into consideration; (i) existing treatment and disposal methods within the facility, (ii) current treatment capacity, (iii) rapid measures needed to augment capacity and/or, (iv) alternative disposal methodologies.

As per the initial rapid survey carried out, it was observed that many secondary and tertiary health institutions in the country have equipment such as autoclaves, metamizers and incinerators for the disinfection and disposal of HCW. The Project in strengthening safe HCWM will aid in augmenting and supporting HCF's in their HCWM activities and methodologies and if required will provide support via procuring necessary equipment and training.

4.6 HOSPITAL ASSOCIATED INFECTION CONTROL

Healthcare associated Infections (HAI or HCAI) are a major cause of concern in health care facilities. Health care associated infections are defined as infections which would be acquired by patient during the process of care in a hospital or any other healthcare facility which was not present or incubating at the time of admission. They also include occupational infections among medical staff and other health care workers. Typically, in low- and middle-income countries the burden of HAI is higher than in high income ones.

In Sri Lanka most of the major hospitals have an Infection Prevention and Control (IPC) program with a dedicated team with trained nurses. The training of nurses on IPC is carried out in Colombo annually by the Ministry of Health. However, in most Sri Lankan hospitals, not even the minimum ratio of one infection preventionist per 250 beds is maintained. IPC units in hospitals are headed by the Consultant Microbiologists, when they are available. All major (Provincial and Teaching) hospitals of the country have full time consultant microbiologists trained locally and overseas, and Board Certified as Specialists in Medical Microbiology by the Board of Study in Medical Microbiology of the Post Graduate Institute of Medicine, University of Colombo, Sri Lanka.

Good quality microbiological laboratory support is a very critical factor for an effective IPC programme. A key drawback in Sri Lanka is the inadequacy of microbiologists as all hospitals do not have the required specialist services and with the exception of the National Hospital of Sri Lanka, each hospital has only one Consultant Microbiologist though the bed strength of several are greater than 1000. Only a few IPC units have medical officers who are trained in IPC. Nurses specially trained on IPC are available in most hospitals. Nurses who have experience after basic training are specially trained in IPC initially for 2 weeks and then periodically by the Ministry of Health of Sri Lanka. Liaison or link nurses who have IPC training are available in each unit or ward in some hospitals. Currently, none of the microbiology laboratories in state hospitals have accreditation with the Sri Lanka Accreditation Board, though some are working towards accreditation.

Sri Lanka does not have a national IPC program or a technical team to carry out IPC work at national level. The National Health Strategic Master Plan 2016 - 2025 (Curative Services) Ministry of Health of Sri Lanka has identified IPC in healthcare settings and combating antimicrobial resistance as two national programs to be implemented during the period 2016-2025. Outcome indicators and a monitoring and evaluation plan have been identified in both these programs.

In Sri Lanka, evidence-based National IPC Guidelines are not available. An **Infection Control Manual** was written based on available evidence and compiled and published by the Sri Lanka College of Microbiologists (SLCM) and is used by most healthcare institutions in the country supplemented by other guidelines issued by the MOH from time to time.

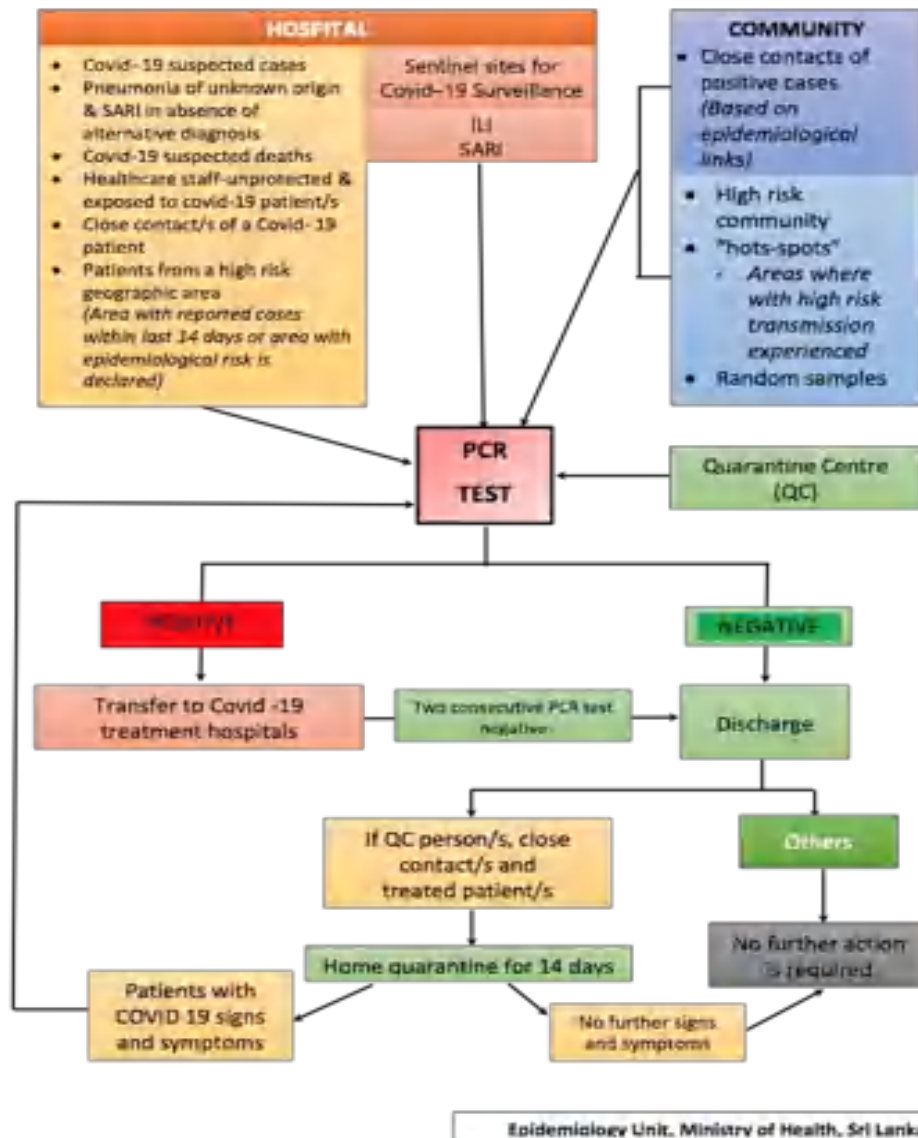
In the case of the current crisis with COVID, infection control and prevention has formed a key strategy to fight the pandemic. Several guidelines have been issued by the WHO as well as the MOH to be strictly adhered to by medical, nursing and other associated health care staff when dealing with confirmed/suspected patients, their waste, dead bodies and contaminated surfaces. So far, there have been no reports of occupational infections from any of the COVID treatment, isolation, quarantine and testing facilities.

The National Approach for testing COVID-19

The figure below illustrates the current (April 2021) COVID-19 testing procedures.

Figure 11: COVID-19 PCR testing algorithm (Epidemiology Unit, Ministry of Health, Sri Lanka).

Covid-19- PCR Testing algorithm



4.7 IMPLEMENTATION CHALLENGES & LESSONS LEARNT FROM THE PARENT PROJECT

The Environment and Social (E&S) Compliance performance was upgraded to ‘Moderately Satisfactory’, in August 2021, from ‘Moderately Unsatisfactory’, given the significant progress made by the PMU in filling the required staffing positions and expediting the implementation of key E&S action. Given below are **key challenges experienced, actions taken including lessons learnt and notable progress made by the project.**

Staffing: There was a considerable delay in completing recruitment of the ESF specialist due to various administrative challenges. However, the recruitment of the ESF specialist was completed in September 2021. Meanwhile, the two medical officers Director from the Directorate of Environmental and

Occupational Health and Safety (EOHS) and the Health Promotion Bureau who has been seconded to the PMU on a part-time basis will also continue to support the newly recruited E&S specialist.

Delays in preparation of E&S screening reports and ESMPs: There was a significant delay in conducting screening and preparing the necessary ESMPs for the planned construction activities, due to the absence of dedicated ESF specialist in the PMU. Later, part-time staff were seconded to expedite the screening and ESMP preparation work. Preparation of screening reports for two new proposed IDH facilities, conducting relevant stakeholder consultations and the subsequent preparation of ESMPs have been satisfactorily completed by the PMU now. Going forward, the project will ensure ESMPs and Codes of Conduct are included in bidding documents and civil works contracts, contractors are well trained on E&S measures and implementation of E&S actions are closely monitored.

Poor Documentation of HCWM planning and management: While the MOH has reported that all HCW from vaccine centers are taken to the nearest secondary hospital for incineration, and that no material adverse impact from improper handling of HCW has been reported, the documentation of the planning for HCW and the actual management of the waste stream needs to be improved. As for the proposed IDHs, HCWM plans are being discussed. The lack of E&S staff in the PMU has been the serious challenge to push forward the HCWM agenda in the past one year. With the recruitment of the E&S specialist the PMU will conduct a rapid Kobo-based survey to understand the gaps and challenges in this area and mobilize project support to addressing them.

Delay in operationalizing the labor GRM: Due to the absence of a dedicated E&S specialist, the labor GRM could not be operationalized in a timely manner. However, upon recruitment of the new E&S Specialist (who will be the focal person to operate the labor GRM), discussion were held on the preparation of the necessary labor GRM guidelines, creating the necessary awareness and putting systems in place to soon operationalize the GRM for project workers.

Notable progress made and key learnings:

- **Project GRM:** Notable progress has been made in terms of operationalizing the project Grievance Redress Mechanism (GRM), which will have and will continue to play an important role in the vaccination program. The project supported GRM functions as the National Grievance Management System for Health Services. Grievance can be received through postal mail, e-mail (Suwasawana@health.gov.lk), short cord hotline (1907) and social media including WhatsApp & Viber. National call center is well resourced, and it can receive complaints in all local languages. GRM units/committees have been established in hospitals nationwide. Since the establishment of the GRM, 1552 grievances have been received and 1314 have been resolved. Based on the types of grievances received, MoH has taken actions to strengthen its communication activities to address information gaps, for e.g.: MoH encouraged public to not pick and choose vaccines, but to take the most accessible vaccine without delay.
- **Risk Communication, including on vaccinations:** Risk communications campaigns have been successfully implemented with the support of UNCIEF tracking public perception of COVID-appropriate behavior, vaccine hesitancy, news and possible misinformation. In addition, a national media campaign was launched in May 2021 on national television and through social media to disseminate public information on infection prevention and control and safety protocols related to the resumption of daily activities. The campaign, which included short video clips, public service announcements, news segments, and animated advertisements, has reached approximately 15 million people through national television, and has recorded a reach of 5.3 million, with 1.6 million engagements on social media.
- **Risk assessment on military involvement:** The project has also completed a risk assessment of the vaccination program run by the Sri Lankan army to ensure that measures are in place to address the associated risks. The findings from the risk assessment concluded that the overall E&S risk of

involving military as being ‘low’, given the measures in place to address the associated risks. Based on the findings, the army personnel involved in the vaccination program are professional cadres in the army medical team with similar educational backgrounds as their MoH counterparts and have been trained by the Epidemiology unit of the MOH on the processes and guidelines to follow during vaccinations. In addition, the army has received training on human rights principles, have adopted a Code of Conduct governed by the Sri Lanka Army Act and complaint reporting mechanisms have also been put in place.

5. POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND MITIGATION

This chapter describes in general terms the potential environmental and social risks and impacts of the types of interventions that will be supported by the project. As recommended the identification of potential risks and impacts are grouped into different stages: *Planning, Construction, Operational and Decommissioning*.

5.1 ENVIRONMENTAL AND SOCIAL RISK CLASSIFICATION AS PER THE WORLD BANKS' RISK CLASSIFICATION

Both the environmental and social risks are considered 'Substantial' for the Project. Environment risks include current uncertainty around project locations and specific activities, occupational health and safety issues (handling of patients, supplies, installation of medical equipment e.g. cold chain facilities), and concerns relating to medical waste management. Equally, two of the most significant risks in the deployment of the vaccination program is the potential environmental pollution and community health and safety issues from handling, transportation, disposal and management of HCW (sharps, syringes, vials, swabs, reagents, medical equipment and PPEs, some of which would be contaminated with blood and bodily fluids,) and the OHS issues related to potential infection of health care workers as well as communities through handling of patients, supplies and installation of medical equipment. Social risks are 'substantial' due to certain limitations that may inadvertently exclude vulnerable groups from fully accessing information, especially related to vaccination, and other services provided by the Project, the risk of increasing GBV/SEA/SH against women and children when in isolation; risk of triggering social tensions due to fears of contamination, stigmatization of affected groups, or competition to access limited medical supplies including vaccinations; and risks associated with the deployment of armed forces in project financed activities. For the vaccination program, the predominant social risks revolve around the challenges in ensuring distribution of the vaccines in an inclusive and equitable manner, inadequate public engagement and spread of misinformation/rumors, absence of voluntary consent when vaccinating, risks of SEA/SH for females, risk of use of excessive force by the military, and health and safety risks due to the lack of facilities to manage Adverse Effects Following Immunization (AEFI).

While Sri Lanka does not have proper systems for the management of solid waste, the health sector has made some advances in terms of managing medical wastes. However, given that COVID-19 is highly infectious and has unleashed a medical emergency of pandemic proportions, additional measures will be taken to ensure that the disease is contained in the process of waste collection, transport and disposal. The physical works envisaged under the Project are of small to medium scale and the associated environmental and social impacts are expected to be temporary, predictable, and easily mitigable. The project will also take adequate measures to strengthen the capacities of the health sector and to reach the most vulnerable groups with relevant information and services with effective communication, stakeholder engagement and protection protocols to minimize social tensions including risks of GBV.

The environmental risks related to the cash and in-kind support program include occupational health and safety of social workers who will be implementing the cash transfer program through exposure to COVID infected people, and community health, especially the elderly, sick and vulnerable from interaction with social workers who may be carrying the infection. The social risks related to the income/in-kind support program includes increase in the risks associated with possible exclusion of eligible beneficiaries that may lead to social tensions among beneficiaries and non-beneficiaries. These risks are likely to be significant especially if there is limited dissemination of information about the cash support, lack of transparency in the application and decision-making process relating to cash transfer, misuse of funds, and inadequate consultations with relevant stakeholders. GBV risks, particularly domestic violence, are likely to be more pronounced due to financial strains on households, additional burden on the caregivers of vulnerable populations, and the receipt of cash transfers which may affect the household dynamics.

SL has a successful immunization program that stores vaccines in temperatures between 2-8 degrees. The existing cold chain system in the country is closely monitored through electronic systems and Ice Lined Refrigerators (ILR) using equipment of Fridge tag, Log tag, and Thermometers with necessary precautionary measures built in to ensure potency of vaccines is maintained to minimize undue adverse events due to cold chain failures. All cold chain locations have their own power failure contingency plans such as backup power generators and thermo-stabilizers to ensure stable power supply is maintained for recommended temperature monitoring. The NDVP has carried out an assessment of cold storage available in the country for the varieties of COVID-19 vaccines available in the market. Accordingly, if the need arises, ultra cold chain facilities from blood banks and universities will be deployed and the balance storage capacity will be procured to accept those vaccines that need -70 degree temperatures to ensure vaccine potency.

ESS1: Assessment and Management of Environmental and Social Risks and Impacts

The project will have many positive environmental and social impacts as it aims to improve COVID-19 disease surveillance, containment, control, treatment and monitoring. The project will: (i) prepare and strengthen the country's health system to implement surge strategies in hospitals with comprehensive emergency response plans; (ii) put in place resources for surge capacity at selected health care facilities in facing the COVID-19 pandemic and sustain sufficient services to patients, and (iii) the first AF will provide a) cash transfers through existing programs for the elderly, persons with disabilities and CKD patients, cash transfers for those who have lost their livelihoods and in-kind support for families in quarantine and the second AF will provide b) effective vaccine deployment in Sri Lanka through vaccination system strengthening, enabling equitable access to COVID-19 vaccines, and to further strengthen preparedness and response activities under the parent project.

However, the project could also cause some environmental, health and safety risks due to the: (i) increased exposure to COVID-19 pathogen, (ii) reagents & other materials that will be used in the project-supported laboratories, testing centers, quarantine facilities and isolation wards, and (iii) the increase in infectious health care waste, (iv) impacts related to civil works (rehabilitation, reconstruction and installation of new ICUs, IDHs, laboratories cold chain facilities, etc and (v) impacts related to oxygen therapy (oxygen concentrators, oxygen cylinders and other oxygen related supplies). The laboratories and relevant health facilities that will be used for COVID-19 diagnostic testing and isolation of patients can generate biological waste, chemical waste, and other hazardous byproducts. The laboratories to be supported by the project will process COVID-19 tests and will therefore have the potential to cause serious illness or potentially lethal harm to the laboratory staff and to the community, so effective administrative and containment controls will need to be put in place in order minimize these risks.

Environmentally and socially sound health facilities management will require adequate provisions for minimization of occupational health and safety risks, proper management of hazardous waste and sharps, use of appropriate disinfectants, proper quarantine procedure for COVID-19, appropriate chemical and infectious substance handling and transportation procedures, proper planning and management of vaccine deployment services, etc. in line with WHO Interim Guidance (February 12, 2020) on "Laboratory Biosafety Guidance related to the novel coronavirus (2019-nCoV)". Accordingly, any virus propagative work (e.g. virus culture, isolation or neutralization assays) will need to be undertaken at a containment laboratory with inward directional airflow (as in the proposed BSL-3 level under the project). Further, appropriate measures would be required to minimize Life and Fire Safety (L&FS) Risk associated with all

activities involving oxygen therapy (e.g. concentration, cylinders transport, and supply) especially when near or around fires and in Pressure Swing Adsorption (PSA) plant enhancement activities. To mitigate these risks, the Ministry of Health (MoH) has prepared this Environmental and Social Management Framework (ESMF) and a Health Care Waste Management Plan (HCWMP). This ESMF provides for the application of international best practices in COVID-19 diagnostic testing and handling of the medical supplies, disposing of health care waste and road safety in transportation of biological samples, dead bodies and other waste. Under the AFs, the key environmental risks are OHS of project workers and health and safety of community members who will be participating in the program and the risk of infection spread due to crowding at the vaccination centers. Mitigation measures will require strict adherence to personal hygiene and social etiquette measures aimed at minimizing occupational health and safety risks from possible exposure to COVID 19 infected persons. For the vaccination programme the most significant environmental risks remain the management of the large number of HCW and OHS risks of infection control within healthcare workers and communities whilst handling patients, supplies or during installation of medical equipment. To mitigate the above anticipated risks a site-specific IC&HCWMPs/ a guidance note on IC&HCWMPs will be incorporated into the operational plans for island wide vaccination clinics in accordance with WHO COVID-19 vaccination guidance documents, the World Bank Group Environmental Health and Safety Guidelines for Waste Management Facilities and other best international practices in order to prevent or minimize accidental infections resulting from environmental contamination.

Obvious social risks related to this type of operation is that marginalized and vulnerable groups (elderly, poor, people with disabilities, chronic illnesses etc.), are unable to or have difficulty in accessing facilities and services designed to combat the disease including vaccination services. Further, potential conflict due to competition over limited medical supplies, limited vaccinations, elite capture of goods and services provided under the project, frustration with containment measures, stigmatization of some social groups, disruption to livelihoods, unemployment, price inflation of basic goods are also social risks of relevance. Inadequate public engagement & spread of misinformation/rumors, absence of voluntary consent when vaccinating and health & safety risks due to lack of facilities to manage Adverse Effects Following Immunization (AEFI) are other additional associated risks. In addition, increase in vulnerability to SEA/SH and GBV due to medical isolation of individuals including female health care workers, spread of infection among healthcare workers due to inadequate adherence to occupational health and safety standards and the risks associated with military involvement such as in the vaccination program.

The provision of services and supplies will be based on the urgency of the need, in line with the latest data related to the prevalence of the cases. The social exclusion risks associated vaccination program will be managed by ensuring that targeting and provision of access to vaccination services are carried out in a fair, equitable and inclusive manner. The vaccination program will ensure transparency in coverage related data in line national criteria reflecting the evolving global recommendations, new epidemiological pattern and the situation surrounding the economic recovery in the country. The National Deployment and Vaccination Plan for COVID-19 (NDVP), will identify a list of prioritized groups who will be targeted for COVID-19 vaccines following the WHO concept for fair access and equitable allocation of COVID-19 health products, and the WHO Strategic Advisory Group of Experts (SAGE) values framework for the allocation and prioritization of COVID-19 vaccination.

GoSL does not have mandatory and forced vaccination policies. The National Deployment and Vaccination Plan for COVID-19 (NDVP) details the procedures to ensure that voluntary consent will be obtained from all eligible individuals. A digitalized real time immunization tracking system for the COVID-19 vaccination has been developed by MoH, which is functional in the Western Province. Further, eligible people can

register at the vaccination site in case their names are missing in the database (irrespective of nationality). This tracking system will be scaled up to cover all districts. Monitoring and evaluation of the programme will be done to identify vaccine uptake, coverage for each dose, and to identify dropout rates.

The key social risks pertaining to the cash and in-kind transfer program under the AF will be related to issues of exclusion and access to information and services specifically for vulnerable and marginalized groups. For example, the risk associated with the eligibility criteria and beneficiary selection processes not being designed in an equitable and a transparent manner thereby inadvertently excluding deserving members of the society. In addition, disadvantaged and vulnerable groups face challenges in accessing information and facilities to apply for the income support grants, which may undermine the objectives of the AF. Risks of OHS for project workers from possible exposure to COVID 19, risks of GBV, SEA and SH that may result from abuse of authority especially during selection of beneficiaries, domestic violence due to economic hardships, and during home visits, especially in homes without any male presence, are additional risks associated with the scale up of cash transfer under AF.

Beyond this, during project implementation all necessary steps will be taken to ensure adequate stakeholder engagement, proper awareness raising and timely information dissemination to: (i) avoid conflicts resulting from misinformation; (ii) ensure equitable access to services for all who need it; (iii) address issues resulting from people being kept in quarantine, and (iv) to ensure transparency in the beneficiary selection processes for cash & in-kind transfer and targeting of population groups for vaccinations. The project can thereby rely on standards set out by WHO as well as international good practice to: (1) facilitate appropriate stakeholder engagement and outreach towards a differentiated audience (concerned citizens, suspected cases and patients, relatives, health care workers, women, elderly, disabled, CKD patients, children etc.); and (2) promote the proper handling of quarantining and vaccination interventions (including dignified treatment of patients; attention to specific, culturally determined concerns of vulnerable groups; and prevention of Sexual Exploitation and Abuse (SEA) and Sexual Harassment (SH) as well as minimum accommodation and servicing requirements in quarantine facilities and isolation units.

Adequate measures need to be put in place to ensure that the medical isolation of individuals does not increase their vulnerability, especially to gender based violence and sexual exploitation & abuse. In addition, vaccination centers will have gender-sensitive facilities such as separate rooms/vaccine areas for female, at least one female staff in place, segregated toilets etc. By engaging female community health workers and female health workers and considering gender sensitive communication and information sharing approaches, the project will mitigate the risk of sexual exploitation, harassment and abuse as well as addressing social/cultural barriers to women's access to information and to the vaccination program. In order to address risks associated with gender-based violence as well as equal access to information and services, the project will draw on COVID-19 Outbreak and Gender: Key Advocacy Points from Asia and the Pacific, UN Women, 2020 and the COVID-19 resources to address gender-based violence risks, WBG EHS Guidelines relating to community health and safety, CDC Interim Infection Prevention and Control Recommendations for patients with confirmed COVID-19 or persons under investigation for COVID-19 in Healthcare Settings' (19 March 2020), to name a few.

As the military is involved in the vaccination program, the project conducted a risk assessment in August 2021 to ensure that adequate measures are in place meeting World Bank's Policy requirements on the use of security personnel. The Risk Assessment Report is currently under review by the WB which details the key findings and also includes a plan of the measures in place to address the risks identified. The findings from the risk assessment concluded that the overall E&S risk of involving military as being 'low', given the measures in place to address the associated risks. Based on the findings from the risk assessment, the

army medical team has received the necessary training on vaccination guidelines to follow, the Code of Conduct governed by the Sri Lanka Army Act 1949 (also in line with WHO Code of Ethics and Professional Conduct) and on human rights principles (in line with Humanitarian International law). In addition, complaint reporting hotlines and recording books are available at all vaccination centers operated by the army.

ESS2: Labor and Working Conditions

Most activities supported by the project will be conducted by health workers, who in general are civil servants employed by Ministry of Health, including health staff from provincial and district health departments from the SMO PCLGA, supportive non-health staff, i.e public servants and temporary workers employed by the MOH, or provincial DOHs and other frontline service providers (e.g., social workers; waste management teams; pharmaceutical suppliers; and military personnel etc.).

Under the cash and in-kind transfer program, the project workers will include government staff of PCU of Ministry of Women, Child Affairs and Social Security (MoWCS), social workers involved in the cash transfer program and community workers who will support the project and the MoWCS to reach out and support vulnerable groups. Vaccination program deployment will be mostly carried out by health workers with co-ordination assistance from the local councils to mobilize people. **However, since of mid 2021, the army medical corps have been brought into the vaccination drive to achieve a high rate of vaccination per day. Sri Lanka stands at 55% population fully vaccinated, one of the highest in the SAR region.**

The key risk is contamination with COVID-19. The project will ensure the application of OHS measures as outlined in WHO guidelines which are captured in the ESMF. This encompasses procedures for entry into health care facilities, including minimizing visitors and putting in place strict checks before entering; procedures for workers in relation to infection prevention; provision of immediate and ongoing training on the procedures to all categories of workers (project and construction workers), ensuring adequate supplies of personal protective equipment (PPE) such as facemask, gowns, gloves, and hygiene facilities (handwashing soap and sanitizer) and posting signage in all public spaces mandating hand hygiene and use of PPE;; and overall ensuring adequate OHS protections in accordance with General EHSGs and industry specific EHSGs and follow evolving international best practice in relation to protection from COVID-19. Also, the project will regularly integrate the latest guidance by WHO as it develops over time and experience addressing COVID-19 globally.

Furthermore, there have not been any suspension or reductions in salaries and other benefits for healthcare or for other essential workers due to COVID-19 emergency measures and the project will continue to ensure that workers rights will be respected such as provision of overtime compensation, annual or sick leave, or severance etc. Measures will also be put in place to provide additional psychosocial support and facilities for health workers to protect from burnout due to the increase in workload. To encourage women to get vaccinated, the vaccination centers will include female vaccinators who will also support outreach activities at the community level. The NDVP specifies that the vaccination team will include at least one female staff and out of four staff at the Vaccination centers.

The envisaged civil works will be of minor scale and thus pose limited risks, but workers need to have access to necessary PPE and hygienic facilities. Also, no large-scale labor influx is expected due to the same circumstance. In line with ESS2, prohibited is the use of forced labor or conscripted labor in the project, both for construction and operation of health care facilities. The use of child labor will also be

prohibited in accordance with ESS2, i.e. due to the hazardous work situation, for any person under the age of 18.

Taskforce on COVID -19, which is a civil body headed by the Commander of the Army and meetings co-chaired by the Commander of the Army and the Director General of Health Services have enlisted the support of the army medical team to supplement the national vaccination program, hence the MoH and the Army medical team functions as two partners of the same vaccination program, following the same guidelines issued by the MoH. In addition, the Sri Lanka Army Medical Corps has exactly same cadre structure as that of its counterpart Ministry of Health (MOH) and receive the same basic and post graduate training as the MOH professionals, medical specialists, medical officers, nursing staff, public health inspectors, and public health midwives receive. The conduct of the military personnel engaged with the public will be governed by the Sri Lanka Army Act 1949 and persons found guilty of violation of prescribed behavior and misconduct may be punished under the provision of “punishments by courts martial in respect of civil offences” thereof. Further, a standing order containing, instructions, rules, regulations, and procedures which have to be followed and adhered to by the military personnel deployed (Vaccination team) to carry out community vaccination, had been issued by Commander-in-Chief of the army infantry unit.

The project will also ensure a basic & responsive grievance mechanisms for project workers, one for the health program and another for the cash transfer program to allow workers to quickly inform management of labor issues, such as a lack of PPE, unreasonable overtime etc. Discussions have also been held with the newly recruited E&S Specialist (who will be the focal person to operate the labor GRM) to prepare the necessary labor GRM guidelines, create necessary awareness and put systems in place to soon operationalize the GRM for project workers for the Health Sector. The labor GRM will be made operational by the time of the proposed Vaccine AF becomes effective. The labor GRM will allow workers to quickly inform involved agencies of labor issues, such as a lack of PPE, unreasonable overtime, unsatisfactory work conditions etc.. These measures have been detailed in the separate standalone Labor Management Procedure (LMP) prepared for the project and will be updated with additional measures as needed.

ESS3: Resource Efficiency, Pollution Prevention and Management

From a pollution point of view, HCW management will be the main concern. Further, for the purchase of medical equipment and cold storage facilities energy/water efficient specifications will be favored. This has been covered under ESS1 above.

ESS4: Community Health and Safety

As noted above, medical wastes and general waste from the labs, health facilities, quarantine and isolation centers have a high potential of carrying micro-organisms that can infect the community at large if they are not properly disposed. There is a possibility for infectious microorganism (not limited to COVID-19 only) to be introduced into the environment if not well contained within the point of generation, transportation and disposal (along the disposal chain) or due to accidents/ emergencies e.g. a fire response or natural phenomena event (e.g., floods, landslides). The HCWMP therefore will describe:

- how project activities will be carried out in a safe manner with (low) incidences of accidents and incidents in line with Good International Industry Practice (WHO guidelines)
- measures in place to prevent or minimize the spread of infectious diseases.

- emergency preparedness measures.

Laboratories, quarantine and isolation centers, screening posts and vaccination deployment centers will thereby have to follow respective procedures with a focus on appropriate waste management of contaminated materials as well as protocols on the transport of samples, vaccines and workers cleaning before leaving the workplace back into their communities. These provisions are outlined in this ESMF, HCWMP and noted in ESS1. Likewise, the operation of quarantine and isolation centers needs to be implemented in a way that both the wider public, as well as the quarantined patients are treated in line with international best practice as outlined in WHO guidelines referenced under ESS1. Under the AF, additional risks to community is envisaged through possible exposure to infected project workers engaged in the cash transfer program.

Accidental pricks and injuries through direct contact, from unsafely disposed sharps in landfills and open dumps (improper disposal of waste into streams, water ways etc), environmental pollution (contamination land, water, air) have a potential of transmitting pathogenic micro-organisms that can infect the communities at large risking community health and safety. As outlined under ESS1 a site-specific IC&HCWMPs/ a guidance note on IC&HCWMPs will be incorporated into the operational plans of the vaccination clinics. To mitigate any anticipated risk of community infection, health and safety during the vaccination program, the site-specific IC&HCWMPs/ guidance note on IC&HCWMPs will describe (i) how vaccination activities will be carried out with all necessary biosafety measures with low incidences of accidents and incidents in line with Good International Industry Practice (WHO guidelines), (ii) measures in place to prevent or minimize the spread of COVID-19 and other infectious diseases, and (iii) emergency preparedness measures. All vaccination centers supported by the project will therefore have to follow respective procedures on proper handling, transport and disposal of HCW and stringent measures for infection control especially those workers cleaning before leaving the workplace back into their communities.

Guidance on logistics and road safety planning for vaccine transportation is also provided in annex 2 of the ESMF. The MoH and the Provincial MoHs will consider these guidelines in preparing vaccine deployment plans to each vaccination centres. Measures to avoid/mitigate road accidents including transport disruptions due to unexpected traffic, floods/landslides/ storms etc. is described in general in the road safety good practice note. Provincial level plans will be developed using this generic format complete with alternative routes in case of transport disruptions and made available as backup for respective MOH offices.

GoSL does not have mandatory and forced vaccination policies. The National Deployment and Vaccination Plan for COVID-19 (NDVP) details the procedures to ensure that informed written consent is obtained from eligible individuals who receive vaccination. Eligible participants will be duly informed on the benefits and possible adverse events of the vaccination and possible duration of protection before offering the vaccination. In the event of the vaccine receiver / eligible person is not mentally stable to provide the informed written consent, a responsible care giver will be identified to provide the consent.

Another community health concern in the project include the potential for individuals to experience adverse events (including serious contraindications and illnesses) following vaccinations, although these events rarely occur. The country's existing guidelines will be implemented for the Adverse Events Following Immunization (AEFI) detection, reporting and management of such events. Eligibility screening will be done by competent health staff capable of identifying contra indications for vaccination. Readiness for AEFI will be ensured by developing adequate competencies through trainings, and proper screening for AEFI before vaccination. Emergency readiness will be assured through observation for minimum 20 minutes post vaccination, the availability of emergency trays with essential medicines together with oxygen facilities for proper management and specialized care arrangements at all vaccination centres. Accordingly,

the MoH will closely monitor, track and respond to adverse events including provisions for compensation. This would be done with reference to the guidelines in the WHO Global Manual on Surveillance of Adverse Events Following Immunization (2014).

The project will promote the avoidance of SEA/SH by adopting the WHO Code of Ethics and Professional Conduct for all health workers, including community workers and military personnel. The project will assess Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) risks associated with project activities and take measures to mitigate the potential SEA/SH risks, by integrating SEA/SH components in trainings for healthcare workers, disseminating information on available services and helplines, and integrating SEA/SH mitigation measures in the SEP. By engaging female community health workers and female health workers and considering gender sensitive communication and information sharing approaches, the project will mitigate the risk of sexual exploitation, harassment and abuse as well as addressing social/cultural barriers to women's access to information and access to vaccine. The project will ensure the provision of gender-sensitive infrastructure such as segregated toilets and proper lighting in quarantine and isolation centers. The project will ensure that all the vaccine centers have measures in place to promote gender friendly environment and enhance women and girls' safety. These include separate rooms/vaccine areas for females, with at least one female staff in place, Code of Conduct for all the staff, information and notices stating the zero tolerance of SEA/SH with contact information of key GBV service providers eg: Mithuru Piyasas, Women in Need (WIN), and accessible and functional GRM ensuring that it is accessible by female beneficiaries.

The army medical team has also received the necessary training on the Code of Conduct governed by the Sri Lanka Army Act 1949 (also in line with WHO Code of Ethics and Professional Conduct) and on principles of human rights (in line with Humanitarian International law). The standing orders of the military also stipulates, among other things, that every military person should conduct himself/herself with dignity, integrity and respect for the public, upholding the credibility of the army, and should: be unarmed, be vigilant of the persons entering the vaccination centers, manage the vaccine recipients in a public-friendly manner without causing any inconvenience to them, not vaccinate persons in army uniforms, organize separate queues for and help pregnant mothers, infirmed, elderly, mothers with infants, maintain cleanliness of the vaccination centers at all times etc. Both the female and male military health cadres are deployed at these centers for ensuring gender respect, and dignity among the patients during the vaccination program. Presence of military police at community vaccination centers is also mandatory as army personnel involved in public activities must be accompanied by the military police. In addition, complaint reporting hotlines and recording books are available at all vaccination centers operated by the army.

All the professional cadres in the army medical team also possess the same educational backgrounds as their counterparts in the MOH do. However, COVID 19 vaccination is considered a specialized task. As such all medical personnel involved in the COVID 19 vaccination program, including the army medical personnel involved in the process are trained by the Epidemiology unit of the MOH. An instructions manual, guidelines are available for the deployed military personnel that lays down all necessary procedures to be followed, from point of collection at the central medical stores or at regional medical stores of the MOH up to the time when the vaccine recipient leaves the premises of the vaccination center, including transportation, maintenance of cold chain, storage, vaccine administration, AEFI observation.

The project will also ensure via the above noted provisions, including stakeholder engagement, that quarantine and isolation centers and screening posts and vaccination centers are operated effectively throughout the country, without aggravating potential conflicts amongst neighboring communities and between different groups. Two project-level GRMs, one for the health program and the other for the cash

transfer program will be instituted and will be equipped to respond to grievances the community may have on project related issues.

ESS5: Land Acquisition, Restrictions on Land-use and Involuntary Resettlement

This standard is currently considered Not Relevant. The project is expected to carry out all renovation and new construction activities either within existing hospital premises or established footprint belong to the GoSL and the vaccination program through existing facilities. As such, no land acquisition is envisaged or required. As part of due diligence measure, land belonging to the government or in the existing footprints of the facilities, will be documented as unencumbered before works can move forward.

ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources

Sri Lanka is a global bio-diversity hot spot and records very high endemism within unique ecosystems that are widely spread out in the country. However, project is unlikely to bring about any biodiversity impacts as all civil works are expected to take place within hospital premises and other government building footprints. As mentioned earlier, all secondary and tertiary care hospitals are located within urban centers and townships in areas of human habitation and hence is away from environmentally sensitive areas. However, under the ESMF all subprojects will be screened, and this process will include specific screening questions and measures to ensure compliance with ESS6 requirements. Attention will need to be given to protection and conservation of large trees at project sites and captured in respective ESIAs, which will need to include measures to avoid, minimize, mitigate or offset potential impacts to tree cover.

ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

Sri Lanka's population includes Veddhas, primarily forest-dwellers, whose collective identity and presence is consistent with the characteristics that are specified in paragraphs 8 and 9 of ESS7. The population of Veddhas is estimated to be around 2,500 - 6,600 and while they used to be concentrated in the south-central jungles of Sri Lanka, in the area known as Mahiyangana, they are becoming completely assimilated with most of them speaking Sinhala instead of their indigenous languages—the latter now nearing extinction.

The proposed activities do not present adverse impacts on indigenous people. However, there is a potential for marginalizing indigenous and vulnerable people in accessing health services including vaccines and vaccine related information. Vaccine deployment and delivery when available, could counter local perceptions as well as cultural protocols and local medicinal practices of IP groups. Accordingly, ESS 7 is considered relevant for this project.

Based on the experience of the first vaccine AF, vaccination of priority groups of vedhha community has been successfully carried out. The Vaccination of two dosages of Sinopharm vaccine has been completed for the age group above 60 years and the first dosage of the Sinopharm vaccine has been given for the age group above 30 years in MOH areas where highest population of "Vadda" community reside. These locations are: Dambana, Henanigala, Rathugala, Nilgala under the preview of MOH offices of Bibile, Ampara and Mahiyanganaya.

Going forward, second AF for vaccines will also carry out vaccinations among the Veddas giving due respect for the rights, dignity, aspirations, identity, culture and livelihoods of IPs. Training and capacity building for health care workers under the project will emphasize the need to provide care for the priority and eligible population, regardless of ethnicity and social status, and with due considerations for the cultural protocols of IPs. The relevant aspects of ESS7 will be adopted to ensure full participation and consultation of IPs throughout project implementation, and to create culturally-sensitive mechanisms by which IPs can raise concerns or seek redress for project-related grievances. Consultations and vaccination campaigns will be conducted through partnership with relevant IP organizations and traditional authorities. Lastly, stakeholder engagement and vaccinations will be conducted with extra precautions to minimize COVID-19 transmission risks, especially for Indigenous Peoples living in more remote areas or in voluntary self-isolation. This may require testing or vaccinating intermediaries conducting consultations who may travel in and out of communities. Based on the information available, the project activities: (i) will not undertake forced vaccination; and is (ii) not expected to induce adverse impacts on land belonging to indigenous groups and are not expected to cause relocation of such groups or cause material changes to their ways of life. Additional measures in terms of engaging IPs is described in the revised SEP.

ESS8: Cultural Heritage

Project activities are highly unlikely to involve risks or impacts on tangible or intangible cultural heritage. Nonetheless, the Standard is considered Relevant. Cultural heritage resources are relatively well documented in Sri Lanka; however, chance finds cannot be ruled out. The ESMF includes due diligence procedures in line with ESS8 to screen for risks and impacts on cultural heritage (in Annex 5 Environment and Social Screening Form) and include chance find procedures (refer 6.2.1.4 Management of PCR chance finds and Annex 4 item 40 of the generic ESMP).

ESS9: Financial Intermediaries

Given the nature of the project, this standard is Not Relevant as there will not be any financial intermediaries that will be involved.

ESS10: Stakeholder Engagement and Information Disclosure

The Project includes a standalone Stakeholder Engagement Plan (SEP) and public outreach procedure that is based on meaningful consultation and disclosure of appropriate information, considering the specific challenges associated with combating COVID-19. Specifically, the SEP includes strategies that will be adopted during the entire project cycle to disclose information related to the project to different groups of stakeholders, receive feedback from them, while also attending to the particular challenges with engaging marginalized and vulnerable social groups such as elderly, persons with disabilities, CKD patients, people in remote / rural areas etc.

The community engagement (CE) approach for the Vaccine program as described in the revised SEP, is based on the national COVID-19 vaccine deployment plan. It focuses on demand generation in communities and clarifies target groups and removes misconceptions related to vaccinations while ensuring a community feedback loop. Thus the objectives of the community engagement strategy includes: (i) disclosure of criteria & justification of the identification of priority populations including details on medically contraindicated groups such as children under 18 years of age (as safety of vaccination on these groups have not been established yet); (ii) building trust and awareness on COVID-19 vaccines, using data and evidence to dispel rumors and public misperceptions and to address vaccine hesitancy to improve demand generation; (iii)

development and provision of context specific IEC/BCC materials targeted to priority groups, details on available services at the vaccination centers catering to needs of women and other high-risks groups and measures in place to manage Adverse Effects Following Immunization (AEFI); (iv) training of front line workers, including ‘Friends of Facilities Committees (FFCs)’ about the COVID-19 vaccine, its importance and measures to promote safety and wellbeing of the public; (v) promoting the COVID-19 vaccine through use of different channels, including mass and social media and community and public outreach interventions; and (vi) citizen engagement, feedback and grievance redressal mechanisms in place for the vaccine program.

In order to increase proper outreach and vaccination of women, the project will support targeted communication, as outlined in the NDVP, to disseminate information regarding the COVID-19 vaccination, particularly to dispel misconceptions about vaccines. Furthermore, the project will also mobilize ‘Friends of Facility Committees’ especially females to play a critical role in communicating with women providing them information about the vaccine and managing misinformation regarding COVID-19 vaccination during the roll-out and deployment as well as work with CSOs working with high-risks groups such as female headed households, women with disabilities, elderly women or women of ethnic minority groups (e.g., Muslim, Tamil, Estate workers) to ensure information around the vaccines reaches them and increases their access to the vaccine by conducting sessions with families, religious leaders and community leaders within communities to educate them on the importance of gender equitable access to the vaccine while addressing misinformation which may prevent families from getting vaccinated.

For the cash and in-kind transfer component under AF, the project will also engage stakeholders specifically vulnerable groups to understand their challenges related to information disclosure and carryout an effective awareness campaign on the cash transfer program, especially on the eligibility criteria, application procedures, GRM etc. The project will mobilize local government officials including community workers to reach out to the elderly, disabled and those who are not able to access information or services etc. easily. Finally, stakeholder engagement activities will be carried out following social distancing measures and other local/international guidelines to minimize spread of the virus. As detailed in the SEP alternate modalities will also be utilized to engage and receive feedback from stakeholders given the restrictions on movement, the need for improved hygiene and social distancing requirements.

Further, as laid out in the SEP, two Grievance Redress Mechanisms (GRMs) have been put in place, one for the health program and another for the cash transfer program. The vaccine program utilizes the existing GRM of the parent project which currently functions as the National Grievance Management System for Health Services.

Information about these services are publicly disclosed throughout the country through broadcast and print media. These GRMs allow people affected by or otherwise involved in project-supported activities, an accessible and inclusive way to raise concerns or lodge complaints related to both programs. The grievance redress system is also designed to handle cases of SEA/SH with a survivor-centered approach and refer cases to SEA/SH service providers.

Beyond this, WB supported the implementation of the national risk communication activities through the parent project. The campaign carried out in collaboration with the Health Promotion Bureau (HPB) tracks public perception of COVID-appropriate behavior, vaccine hesitancy, news and possible misinformation. In addition, a national media campaign was launched in May 2021 on national television and through social media to disseminate public information on infection prevention and control and safety protocols related to the resumption of daily activities. Therefore the project implementation will include a broad and well-articulated project communication strategy, which will not only help with the implementation of the community mobilization and behavioral change objectives of Component 1, but also help in a broader sense

to tamp down rumors and misinformation about COVID-19, to ensure equitable access to services, address issues around stigmatization & fears and to counteract the isolation and uncertainty that comes from people being kept in quarantine.

5.2 RISKS RELATING TO VULNERABLE GROUPS, INCLUSION AND SOCIAL COHESION

Inability of marginalized and vulnerable social groups to access information: One of the key risks associated with the Project is the inability of vulnerable social groups (e.g., women, elderly, people with disabilities, households in remote areas, marginalized groups like the *Veddas*, etc.) to access information relating to the project even whilst some of them are more at risk to contracting the virus. For example, elderly groups may not own, know how to operate electronic devices such as TV, Radio or mobile phones to access information or seek assistance. Likewise, the burdens of unpaid care work fall on women and girls during crises as well as social distancing; yet, women have less access to information around how to provide care and support. If not properly mitigated, these factors could really undermine the objective of the project.

Inability of marginalized and vulnerable social groups to access services including vaccinations and facilities: Similar to the issue of access to information, these vulnerable groups such as the elderly, poor, the *Veddas*, people with disabilities, households in remote areas, may not be able to easily access services including reach vaccination centers and facilities provided under the Project. While Sri Lanka provides free medical services and easy access to health care facilities, under current context, the curtailed transport facilities, lack/limited financial resources (due to loss of incomes/livelihoods as well as of family members) and inability to access support systems, may hinder the ability of these groups to access vital health services. Further, those in rural areas may find it difficult to travel long distances to townships to access hospitals with specialized services to receive treatment for chronic diseases and pre-existing medical conditions or even symptoms relating to COVID-19. In addition, elderly and people with disabilities will also be challenged in terms of traveling to collect/submit applications from the Divisional Secretaries and collect their cash payments from post offices. Health staff, from doctors to midwives and even other social workers, maybe too stretched addressing COVID-19 cases that they do not have the time or the resources to treat and care for elderly and those with chronic diseases and pre-existing medical conditions. In addition, elder care homes, orphanages, homes for the disabled and shelters for GBV victims would also be constrained with limited financial resources and capacities to provide the basic facilities and services for these occupants in these homes during the pandemic.

Insufficient accommodation and servicing requirements: Insufficient accommodation and servicing requirements, lack of universal access principles, inadequate provisions for additional support to vulnerable groups, and absence of dignified treatment of patients and their families in health care facilities, quarantine centers, isolation units, vaccination centers are important considerations under the project. Further, there are also increased risks relating to GBV/SEA/SH, child abuse, etc., while in quarantine/self-isolation and at vaccination centers. Prevention of sexual exploitation and abuse and sexual harassment, ensuring minimum accommodation and servicing requirements in health care facilities and quarantine and isolation centers/units, effective handling of quarantining interventions including dignified treatment of patients and their families; attention to specific, culturally determined concerns of vulnerable groups, are issues that will require close attention while managing the social risks of the project. Similarly, some vulnerable groups

(especially the elderly, people with disabilities or those with pre-existing medical conditions) may be severely affected by COVID-19 and may need additional support to access treatment.

Increase in social tensions: The widespread disruptions related to the COVID-19 pandemic is also likely to trigger social tensions over number of issues. First, there are concerns relating to the spread of disease, risk of contamination and inadequate waste management, especially in neighborhoods and areas close to health care centers, quarantine facilities and isolation units. Social tensions could arise as a result of competition over limited medical supplies, vaccinations, elite capture of goods and services including vaccinations provided under the project, frustration with containment measures, stigmatization of some social groups, to name a few coupled with disruption to livelihoods, employment, price inflation of basic goods, etc. The expansion of cash & in-kind transfers and vaccination through the AF will increase risks associated with possible exclusion of eligible beneficiaries which may lead to social tensions among beneficiaries and non-beneficiaries.

Further, as the pandemic spreads and the health systems struggle to cope with the caseloads, public especially vulnerable groups may face challenges in terms of accessing health services in a timely manner, which could further fuel social unrest. Conflicts may also arise from false information/rumors, lack of information related to eligibility & transparency in the application for cash transfer and inadequate consultations with relevant stakeholders. Anger and stigma towards certain communities and infected persons may also result in discriminating certain groups in society (such as tour guides, foreigners, health care staff and military personnel). Public may also fear accessing health services due to contamination and may also fear reporting suspected cases due to fear of stigmatization, fear of being quarantined and being asked to leave residential dwellings. Further inadequate public engagement, spread of misinformation/rumors (about vaccine safety, based on previous vaccine experiences and religious and cultural norms) could create confusion, anxiety, and affect uptake of the COVID19 vaccination, which could even lead to possible social tensions in case of inequities and/or discriminatory practices.

Risks Associated with SEA/SH, GBV and Violations of Child Rights: As countries around the World have been imposing 'lockdowns' to stop the spread of coronavirus, women and children in quarantine and in self-isolation are at risk of gender-based violence and abuse. In Sri Lanka, various incidents have been reported violating the rights of women and children over the one-month period of partial lockdown. Most reported cases fall predominantly under domestic and intimate partner violence, child abuse and cruelty to children. According to Women In Need (WIN), of the 250 calls they received between March 16 and April 01, 60% were related to domestic violence. The increased incidence of domestic violence has been corroborated by health staff in hospitals who have spoken about the increase in the number of women admitted to the accident ward with domestic violence-related injuries. Initial consultations with communities and stakeholders revealed the increased risks of GBV incidents due to women being pressured at home to avoid taking the vaccine, given the misinformation/rumors about vaccine safety and also based on religious and cultural norms.

As the military is involved in the vaccination program, the project has conducted a risk assessment to ensure that adequate measures are in place to address the associated risks such as risks of unlawful/abusive behavior, including sexual exploitation and abuse (SEA)/sexual harassment (SH) or excessive use of force. The findings from the risk assessment concluded that the overall E&S risk of involving military as being 'low', given the measures in place to address the associated risks. As per the findings from the report, no human right violations or GBV/SEA/SH have been reported to the military or the MOH through the available channels during the vaccination program.

UNICEF Sri Lanka together with the National Child Protection Authority (NCPA) has also reported that in the three-week period between 16th March to 7th April 2020, the proportion of child cruelty cases as a total, rose from 10 per cent to 40 per cent. Accordingly, a total of 292 child protection complaints have been received via NCPA hotline 1929 during the last 23 days period and there have been 121 cruelty to children cases. These too can be identified as erupting from the pressures of economic hardships, work stress (including lack of work) encumbered on the children who are at home all day unable to go to schools or meet their peers. Limited mobility and lack of space sometimes within the homes and pressure of completing assigned schoolwork on the part of the children has created this tense situation between them and their parents and caregivers.

5.3 RISKS ASSOCIATED WITH THE DEPLOYMENT OF SECURITY PERSONNEL

Background & history of military involvement in civilian activities:

The armed forces in Sri Lanka are the unified military encompassing the Sri Lanka Army, the Sri Lanka Navy, and the Sri Lanka Air Force. While the armed forces were heavily engaged in the thirty-year prolonged civil war that ended in 2009, deployment of armed forces in country's emergency situations such as during natural disasters is not an uncommon practice in Sri Lanka. In fact, such roles and responsibilities for the armed forces are prescribed in the national policy and institutional framework. For example:

- Sri Lanka Disaster Management Act, No 13 of 2005 provides the framework and guidelines for effective management of disasters in Sri Lanka including of the response operations of the Covid pandemic. As the 'National Council for Disaster Management' in Sri Lanka is chaired by President of Sri Lanka who is the Commander-In-Chief of Armed Forces, this provides the armed forces the legal basis for their involvement in emergency response operations in Sri Lanka.
- In the National Disaster Management Programmes, the armed forces are specifically mentioned for search and rescue operations and mobilized to provide assistance to District and Divisional Secretaries for search and rescue operation and distribution of food and essential relief items.³²
- The Disaster Management Centre, established as the executing arm of the National Council for Disaster Management in accordance with the Sri Lanka Disaster Management Act No. 13 of 2005, coordinates and collaborates with ministries, departments, agencies, local and national authorities, armed forces, police, international and national NGOs in regard to managing disaster risk reduction in Sri Lanka.³³
- Communication systems for early warning dissemination is set up such that the existing system of communication from the national level to lower levels is primarily by means of the police and

³² 'Sri Lanka Comprehensive Disaster Management Programme (SLCDMP), 2014 – 2018,' Available at <http://www.disastermin.gov.lk/web/images/pdf/slcdmp%20english.pdf>

³³ Sri Lanka Ministry of Disaster Management. Disaster Management Centre. Last updated September 26, 2017. http://www.disastermin.gov.lk/web/index.php?option=com_content&view=article&id=54&Itemid=78&lang=en

armed forces communication systems, radio communications, multi-hazard early warning towers, media outlets and telecommunications.³⁴

Accordingly, in the recent past, security personnel have been engaged in rescue operations, transportation and distribution of relief-aid, management of centers/camps established for the displaced populations affected by disasters, and the restoration of damaged public infrastructure in situations such as the 2004 Tsunami, and afterwards during several incidences of major floods and landslides.³⁵ Engagement of armed forces in such situations was useful particularly at times when civil institutions had only limited resources and the capacity to restore the situations. On the contrary, the security forces in the country are relatively better equipped with the necessary infrastructure, human resources, expertise, and the capacity to deal with such major catastrophes.³⁶

While in the case of military operations, there have been allegations over the involvement of armed forces in human rights violations during the thirty-year long civil war,³⁷ there has been no major adverse reports on the deployment of security personnel in emergency situations. Instead, the civilian community in general has valued the services provided by the tri-forces in the recovery operations.³⁸ Unlike in a war situation where the tri-forces would carry out their operations independently to reach their militarily set targets, roles performed by the security personnel are very different in the context of support/aid to civilian matters. In fact, in terms of emergency response and relief during disasters, the security forces follow a different set of rules of engagement, ‘Military Aid for Civil Authorities Operations.’ In terms of code of conduct, the ‘Army Act (1949), Navy Act (1950) and Air Force Act (1950)’ governs the conduct of armed forces in all settings either during combat or during involvement in civilian affairs. The Act enforces strict legal action / court martial for those accused of offences against property or persons. These include offences related to theft, misappropriation, willfully damaging property, causing any form of violence, criminal breaching of trust, etc.

Involvement of military in pandemic response:

Further, the role of security forces in relation to the COVID-19 response has been significantly different from the situations where security forces are mobilized to prevent and/or control ³⁹communal conflicts and violence or to engage in rescue operations in natural disasters. As per the guidelines given by the President, a ‘National Operation Centre for Prevention of COVID-19 Outbreak’ was established in March 2020 with the objective of centralizing, expediting, and implementing all necessary preventive and containing measures against the transmission of COVID - 19 pandemic, with the Centre being headed by the Chief of Defense Staff and Commander of the Army. The Government called for the services of security personnel to assist in a number of major interventions which among others include the surveillance of COVID-19 affected persons (particularly those who avoid quarantine/treatment), management of isolation/quarantine centers, construction of temporary isolation centers, transportation of essential goods, supporting the

³⁴ <https://reliefweb.int/sites/reliefweb.int/files/resources/CFE-DM%20Reference%20Handbook-Sri%20Lanka%202017.pdf>

³⁵ <https://www.army.lk/military-to-civil-authorities>

³⁶ <https://reliefweb.int/sites/reliefweb.int/files/resources/CFE-DM%20Reference%20Handbook-Sri%20Lanka%202017.pdf>

³⁷ <https://www.hrw.org/news/2019/09/26/un-takes-strong-stand-sri-lankas-army-chief>; <https://www.crisisgroup.org/asia/south-asia/sri-lanka/sri-lanka-s-human-rights-crisis>

³⁸ Freedom House. 2015. Sri Lanka. Freedom of the Press 2015. <https://freedomhouse.org/report/freedompress/2015/sri-lanka>

³⁹ <https://alt.army.lk/covid19/content/national-operation-centre-prevention-covid-19-outbreak-hold-its-first-media-briefing>

vaccination program and to reinforce the capacities of the Sri Lanka Police in maintaining law and order, particularly during curfew periods and in the ‘locked-down’ areas.⁴⁰ Accordingly, the engagement of security forces in COVID-19 operations were largely complementary, and focused on accompanying and reinforcing the efforts of the medical and health services, the police, and the various service providing agencies for the containment of the COVID-19 situation.⁴¹ The security personnel worked closely and jointly with those civil institutions such as medical officers, public health inspectors etc., and were not mandated to act independently outside the interventions planned and geared by the civil institutions.⁴²

Involvement of military in the vaccination program:

When the COVID 19 morbidity began to spread length and breadth of the country in 2020, His Excellency the President decreed the establishment of the National Taskforce on COVID -19 of which stakeholders, among others, are health sector, armed forces, information, aviation, tourism, port authorities, education and communication sector, disaster management. At a time when the MOH vaccination program was gathering momentum, trade union actions by the health sector employees resulted in a sharp decline of the numbers vaccinated in a day, to a level as low as 2000, the need of the hour was to call in the army medical team to supplement the national vaccination program in the interest of this national priority in keeping the momentum gained. From there onward, the army medical team, under the overall supervision of the MOH, is involved in the National COVID -19 vaccination program, this can be viewed as the execution of a national program by two partners, who are trained on the same processes and use the same guidelines issued by the MOH for COVID vaccination.

The decisions and direction for the vaccine program is provided by the taskforce on COVID -19, which is a civil body headed by the Commander of the Army and meetings are co-chaired by the Commander of the Army and the Director General of Health Service and the Army medical team functions as two partners of the same vaccination program, following the same guidelines issued by the MoH. Therefore, the necessity for segregation of duties, in the form of an official agreement or MoU, between the army medical personnel and the MOH personnel involved in the COVID 19 vaccination program did not arise. In this context, it was the MOH that requested the army medical team to conduct vaccination centers at locations decided upon mutually. Community vaccination centers are in public places away from residential and business areas in order to minimize any disturbances and inconveniences caused to public, where large crowds could be accommodated. These are large open areas with erected temporary shelters with essential utilities. In addition to the conduct of community vaccination centers, the army launched a mobile COVID-19 Vaccination Fleet on 12th August 2021, that prioritized the vaccination of the elderly, sick, handicapped, and feeble sections in society, a combined effort of the Sri Lanka Army Medical Corps (SLAMC), Directorate of Preventive Medicine and Mental Health MOH, Directorate of Supply and Transport, Sri Lanka Signal Corps, and Sri Lanka Corps of Military Police. The mobile vaccination teams visit homes of the needy and carry out the vaccination, following their requests for services. Like in community vaccination centers, prior to vaccination, a written consent was obtained from the person receiving the dose of the vaccine.

⁴⁰ <https://www.wsws.org/en/articles/2020/03/18/sril-m18.html>

⁴¹ <https://ceylontoday.lk/print-more/54789>

⁴² <https://srilankabrief.org/2020/04/prompt-interventions-by-military-helped-to-reduce-coronavirus-impact-in-sri-lanka-defence-secretary/>

Findings from the risks/due diligence assessment:

A risks/due diligence assessment was conducted given the involvement of military in the vaccination program to ensure that measures are in place to meet World Bank's Policy requirements on the use of security personnel. The risk assessment done following the guidelines given in the:

- a) Assessing and Managing the Risks and Impacts of the Use of Security Personnel, World Bank.
- b) Use of Military in COVID -19 Operations: Suggestions for Due Diligence and Mitigation.

Version 1: March 25, 2020

This risk/due diligence assessment included a) a desk review of available documents that made the basis of the planning, designing, and operation of military involved in the national COVID 19 vaccination program, and b) consultations with those that are involved in the vaccination program, Government counterparts and army, army personnel and the public. Findings from the risk assessment and consultations concluded that the overall E&S risk of involving military as being 'low', given the measures in place – such as Code of Conduct, training on human rights, GRM hotlines and vaccination operation guidelines which are followed by military issued by the MoH. As per the findings from the report, no human right violations or GBV/SEA/SH have been reported to the military or the MOH through the available channels during the vaccination program.

The performance of the security forces in the COVID-19 operations are closely monitored and supervised by none other than their respective commanders-in-chief who in turn work intensively with the health and related authorities of the country. In terms of the code of conduct, the 'Army Act (1949), Airforce Act (1950) and Navy Act (1950)' details the terms and conditions of employment and governs the conduct of armed forces in all settings either during combat or during involvement in civilian affairs. The military code of conduct governed by the military Acts are in line with World Bank's Policy on the use of security personnel and WHO Code of Ethics and Professional Conduct. The Act enforces strict legal action / court martial for those accused of offences against property or persons. These include offences related to theft, misappropriation, willfully damaging property, causing any form of violence, criminal breaching of trust, etc. In the event of any violations of provisions as set out in the Army Act of Sri Lanka, inquiries will be held by the military police and if any person found guilty of offence will be punished and sanctioned under "punishments by courts martial in respect of civil offences" of the Army Act of Sri Lanka.

The military personnel involved in the vaccination program are professional cadres in the army medical team with the necessary educational backgrounds and have been trained by the Epidemiology unit of the MOH on the processes and guidelines to follow during vaccinations. The army personnel have also been trained by the 'Directorate of Human Rights and International Humanitarian Law' established within the army on Human Rights Principles, International Humanitarian Law (IHL), International Law System and IHL Universal Code.

In addition to the Army Act governing the conduct of military, the army follows the following guidelines and instructions during the vaccination program:

- Guidelines for the Conduct of COVID-19 Community Vaccination Centers, Issued by the Directorate of Preventive Medicine and Mental Health of the Army.
- Standing Order on Instructions to be followed by Army Personnel Involved in the Community Vaccination Centers, issued by the Commander-In-Chief of the Army Infantry Unit.

The standing order issued by Commander-in-Chief of the army infantry unit stipulates that every military person should conduct himself/herself with dignity, integrity and respect for the public, upholding the credibility of the army, and should : be unarmed, be vigilant of the persons entering the vaccination centers, manage the vaccine recipients in a public-friendly manner without causing any inconvenience to them, not vaccinate persons in army uniforms, organize separate queues for and help pregnant mothers, infirmed, elderly, mothers with infants, maintain cleanliness of the vaccination centers at all times etc. Both the female and male military health cadres are deployed at these centers for ensuring gender respect, dignity among the patents during the vaccination program. Presence of military police at community vaccination centers is also mandatory as army personnel involved in public activities must be accompanied by the military police. Both the female and male military health cadres are deployed at these centers for ensuring gender respect and dignity among the patents during the vaccination programme. In addition, to mitigate any social tension that could erupt as a result of the army, predominantly being Sinhalese, working in different social settings, army personnel conversant in Tamil language and Tamil government officers are employed in such locations.

Involvement of military in other project activities:

When military is involved in project financed activities, such as construction of additional isolation units/facilities and providing logistical support, measures described in the ESMF, SEP and LMP will apply. In the case of construction activities, the security forces will be confined to the existing premises of those institutions, which are mostly located in urban areas, and under the close monitoring and supervision of medical and health experts.⁴³ All procurement for the isolation wards will be done by the MoH, with no financing going to the army. The security personnel if engaged in such civil works, will not require to be accommodated in temporary labor camps as they can be easily drawn from among the closest regiments stationed in the respective districts. Additionally, if military/security personnel are engaged in construction works will also avoid possible use of child labor or forced labor for those civil works. The engagement of the security personnel in construction works will be considered completed once the isolation units, wards are operational or until the COVID-19 situation is contained to reasonable levels.⁴⁴

If military are engaged in construction activities financed by the project in addition to their involvement in the vaccination program, the military will follow the Codes of Conduct governed by their legal Acts including adherence to WHO Code of Ethics and Professional Conduct, will ensure the military personnel involved have received the required training and reporting hotlines are in place in addition to implementation of the site specific ESMPs. In the circumstances, the risks of the involvement of security forces in a set of pre-determined tasks related to COVID-19 operations, and possible implications in human rights violations, significant social conflicts, and in the incidences of gender-based violence, sexual exploitation and abuse and sexual harassment and bribery and corruption can be considered low as in the case of the vaccination program. Yet, the Project will include several mitigation measures to ensure the optimal and efficient use of the services of security personnel for the intended purposes, to avoid any

⁴³ The Government of Sri Lanka Ministry of Health & Indigenous Medical Services Sri Lanka COVID-19 Emergency Response and Health Systems (P173867); [Environmental and Social Commitment Plan \(ESCP\)](#)

⁴⁴ However, the Government may require the services of the armed forces for a further period, especially for the construction/renovation work of a number of medical and healthcare infrastructures including isolation centres which it has planned to establish throughout the country in the immediate future. And the government may have to rely on security personnel for the accomplishment of these urgent construction works until such time the civil contractors and their labor teams are able to replace the work carried out by the security forces

unacceptable behaviors on the part of those security personnel, and to prevent any form of adverse impacts on the communities.

5.4 ENVIRONMENTAL AND SOCIAL RISKS OF THE PROJECT AND RISK MITIGATION

5.4.1 Planning and Design Stage

1. **Procurement of goods and supplies.** The Project will engage in the procurement of goods and supplies e.g. equipment such as ventilators, PPEs, cleaning materials, vaccines, vaccine storage (cold chain systems) or vaccine distribution equipment, etc., and the PMU will continue to be responsible for ensuring that the required technical specifications are met as per WHO guidelines and GIIP. This will involve:
 - a. Preparation of technical specifications on the PPE for healthcare workers and service staff (e.g., cleaners) according to WHO interim guidance on rational use of PPE for coronavirus disease 2019
 - i. Special considerations such as separate dedicated equipment (for example blood pressure machine, peak flow meter and stethoscope) for isolation wards should be given, but should avoid excessive soft furnishings etc.
 - b. A portfolio approach under the right conditions of value for money, regulatory standards and delivery time among other key features will be followed by SL in procuring vaccines from the market. This approach enables GoSL to purchase more vaccines and increase vaccination coverage at lower cost as different vaccines become available in the global market. COVID-19 vaccines financed and procured under the project will satisfy World Bank's Vaccine Approval Criteria.
 - c. Distribution of goods or services on basis of need, while ensuring that the distribution systems are not compromised due to elite capture. Additional attention to ensure/verify that disadvantaged groups and vulnerable groups are able to access such goods and services.
 - d. Safe and secure storage facilities. The PMU will to continue to ensure that the new vaccine storage equipment to be procured will be based on criteria of energy & water efficiency with minimum generation of GHG.
 - e. Procurement of goods and services to meet the specific needs of women and female health workers (e.g., sanitary napkins, hygiene kits).
 - f. Collection of samples, transport of samples and testing of the clinical specimens from patients will be performance in accordance with WHO interim guidance Laboratory testing for coronavirus disease 2019 (COVID-19) in suspected human cases.
 - g. Tests will be performed in appropriately equipped laboratories (specimen handling for molecular testing requires BSL-2 or equivalent facilities) by staff trained in the relevant technical and safety procedures.
 - h. Inclusion of the relevant specification, process and procedures in the site-specific ESMP based on the generic ESMP presented in Annex 4.
2. **Construction/rehabilitation work in existing HCFs.** The PMU will screen each HCF for potential environmental and social risks per World Bank Group ESF, EHS Guidelines, WHO

COVID-19 Guidelines,⁴⁵ ESF Good Practice Note (GPN) on Use of Security Forces, on SEA/SH, and the IFC Good Practice Handbook on the Use of Security Forces: Assessing and Managing Risks and Impacts, and national guidelines issued by the MOH, using the screening form contained in Annex 5. Screening will include:

- a. Determination of any needed design changes in the facility or its operation (such as in ICUs, isolation facilities, quarantine facilities), with regard to structural and equipment safety, universal access, nosocomial infection control, safe storage, transport and disposal of medical wastes.;

Example: Isolation rooms to be single rooms with attached toilet, with negative pressure, sited away from public/common areas and have ante-room for staff to put on and take off PPE and to wash/decontaminate before and after providing treatment

- b. Identification of the scope of works expected (i.e. wards rehabilitated into ICUs and isolation wards, installation/augmentation of water supply, drainage systems, installation of sanitary stations and wastewater treatment, rehabilitation or installation of medical waste incinerators, etc)
- c. Assessment of the need for land acquisition and/or impacts in terms of restrictions on land use. This will depend on whether the construction/rehabilitation work will involve new construction or expansion, upgrading or rehabilitation. If land acquisition and/or restriction on land use is expected, a separate RAP should be prepared and implemented prior to initiating civil works.
- d. Incorporate universal access standards, and determine if special consideration is required for differentiated treatment for different users of the facilities, depending on their needs;
- e. Determination that utilities (power, water, heat, etc.) are adequate for planned works;
- f. Identification of how such works might interfere with normal operation of the HCF;
- g. Determination if works are eligible for financing - for example, works conducted in wards or areas where patients are being treated where asbestos insulation or pipe lagging was used in original construction (a list of excluded activities is found in Annex 14);
- h. Determination of the number of workers required, possible influx of labor, and whether external or additional security personnel are needed and how many for the civil works.
- i. Training on Codes of Conduct and protocols related to GBV, SEA/SH prevention, including to security personnel; Additional training for first line health workers to respond to GBV issues.
- j. Preparation of a site-specific ESMP based on the Generic ESMP presented in Annex 4

⁴⁵ The World Bank ESF, including ESS 4, also contain relevant information. See <https://www.worldbank.org/en/projects-operations/environmental-and-social-framework>

- 3. Medical waste management and disposal.** The PMU will continue to screen each HCF's medical waste management and disposal practices to determine if they are in keeping with the World Bank Group's EHS Guidelines and current WHO Guidelines for COVID-19. The screening will be conducted based on the screening form found in Annex 5 and include:
- a. Identification of current methods of medical waste management and disposal at the HCF;
 - b. Identification of any on-site facilities for disposal of medical waste including incinerators, pits for burning medical waste, pits for burial of medical waste, etc.;
 - c. Identification of healthcare waste streams, including wastewater, solid waste and air emission at the HCF and vaccination centers.
 - d. Identification of any off-site disposal of medical waste, including how material is gathered and stored, routes taken to the disposal facility, and disposal procedures;
 - e. Review of specific protocols put in place for dealing with medical waste specifically related to COVID-19;
 - f. Review of training procedures for healthcare workers and other relevant HCF employees for medical waste management and disposal;
 - g. Preparation of an HWMP, based on the Generic HCWMP contained in Annex 6, for the HCF. If a HCWMP exists already, review and carry out gap filling as needed for strengthening the waste collection, transportation, treatment and disposal system.
- 4. Occupational Health and Safety.** The PMU will continue to review the HCF's protocol's for protecting healthcare workers from infections disease based on current WHO Guidelines for COVID-19, national guideline issued by the MOH and the Infection and Prevention Protocol contained in Annex 7.
- The review will include:
- a. Determination if training given to healthcare workers and other HCF employees is adequate;
 - b. Determination if HCF staff are trained on how to deal with the remains of those who might die from COVID-19, including those conducting autopsies;
 - c. Determination if adequate stores of PPE are available on-site; and
 - d. Identification of supply lines for required PPE.
 - e. Review of Fire and Safety protocols of commissioned PSA (oxygen) plants and any other activity involving oxygen therapy/oxygen supply.

5. **Containment of COVID-19.** The PMU will continue to review HCF's protocol's for dealing with the general public based on current WHO Guidelines for COVID-19 and the Infection and Prevention Protocol contained in Annex 7. A lot of these are already done.

The review will include:

- a. Review of identification, testing, and treatment protocols for those exposed to or suspected of being infected with COVID-19 for groups of higher sensitivity or vulnerability like the elderly, those with preexisting medical conditions, heavy smokers, or the very young;
- b. Updating visiting rules and regulations for families and friends of patients;
- c. Briefing procedures for families and friends of COVID-19 patients on how the disease is spread and how to minimize that spread;
- d. Briefings for the general public on COVID-19 through mass communication strategies; and
- e. Ensuring those HCF employees and any outside personnel charged with handling remains of patients who have died from COVID-19 are familiar with WHO Guidelines.

6. **Communication Approaches and Strategy.** It is critical to communicate to the public what is known about COVID-19, what is unknown, what is being done, and actions to be taken on a regular basis. Further, getting feedback from stakeholders and using their grievances, suggestions, in design and implementation of project activities would also be important.

- a. Under Component 1, 'Community engagement and risk communication' information and communication activities prepared to increase the attention and commitment of government, private sector, and civil society, and to raise awareness, knowledge and understanding among the general population about the risk and potential impact of the pandemic and to develop multi-sectoral strategies to address the pandemic.
- b. As detailed in the SEP prepared separately, stakeholders will be consulted primarily via phone and online platforms, to receive their feedback and suggestions on project design and preparation. Also, there will be GRM by which people can raise concerns, provide feedback, or make complaints about project and any activities related to the project.
- c. The communication and stakeholder engagement will also target vulnerable groups to educate them on specific risks from project interventions and receive their feedback.

7. **Access to appropriate and timely medical services, hand hygiene and PPEs.** The PMU will continue to review HCF's protocol's for securing quick access to appropriate and timely medical services based on current WHO Guidelines for COVID-19.

The review will include:

- a. Number of ambulance teams and equipment available to cover distant locations and timelines of medical services to be reached;
- b. The location of HCFs with ICUs to be selected based on designated COVID-19 treatment network and expanding geographical access to health care services in order to ensure equitable access to highly specialist care across the country;
- c. Pain medications, antibiotics and other routine medicines needed for the ICUs;
- d. Training of all staff at all ICUs in COVID-19 treatment centers on infection prevention, as well as longer-term capacity building in critical care provision;
- e. Determination if adequate stores of hand sanitizers and PPE are available in all project sites; and
- f. Identification of supply lines for required PPE.

8. Vaccine readiness and prioritization: Sri Lanka with the support of partners including the World Bank, WHO, UNICEF and ADB has conducted a vaccine readiness assessment using the Vaccine Readiness Assessment Framework (VRAF)/Vaccine Introduction Readiness Assessment Tool (VIRAT) to identify gaps and options to address them (Annex 2). Accordingly, the NDVP has incorporated the findings of the assessment and provides details of planning and coordination, prioritization, targeting, service delivery, any identified gaps in the vaccine cold chain infrastructure, vaccine communication strategies, monitoring and evaluation, surveillance etc. The relevant procedures and protocols as described in the VRAF/VIRAT and the NDVP will be followed in carrying out a successful and efficient vaccine rollout program.
9. Surveillance of Adverse Events Following Immunization: The country's existing guidelines will be implemented for the Adverse Events Following Immunization (AEFI) detection, reporting and management of such events. Sri Lanka has a well-established targeted time tested AEFI surveillance system including AEFI guidelines that is compliance with international requirements such as WHO Global Manual on Surveillance of Adverse Events Following Immunization (2014).

5.4.2 Construction Stage

1. **Construction work at existing HCFs.** The PMU will continue to ensure that all rehabilitation work done under the project will be carried out in compliance with a site-specific ESMP prepared based on the Generic ESMP presented in Annex 4 and the Template presented in Annex 8. The PMU will also ensure that the site-specific ESMP will be included in any works or supervision contracts entered into for a specific HCF. The site-specific ESMP will include:
 - a. Environmental risks and issues such as resource efficiency and material supply;
 - b. Construction related solid wastes, wastewater, noise, dust and emission management;
 - c. Hazardous materials management;
 - d. Occupational Health and Safety (OHS) issues;
 - e. Measures for addressing GBV/SEA/SH risks, gender and disability issue;
 - f. Community health and safety issues, including from pollutants and road safety
 - g. Issues associated with the use of security or military personnel
 - h. Determination to ensure that the land considered for civil works is free of encumbrances
 - i. Arrangements for employment and accommodation of workers to be engaged in project activities, and issues relating to working conditions (including in relation to periods of sickness and quarantine), particularly if these are impacted by emergency legislation
 - j. Labor and working conditions, including those for security forces involved in the project.
2. **Issues specific to labor and working conditions.** The PMU will continue to require the contractor to adhere to standards relating to:
 - a. Labor management and working conditions as laid out in the 'Labor Management Procedure' prepared under the project, including in relation to periods of sickness and quarantine
 - b. Labor issues to be incorporated in the ESMP, as mentioned above.
 - c. Arrangements for employment and accommodation of workers to be engaged in project activities, and issues relating to working conditions
 - d. Specific measures/prohibitions that will be enacted in the deployment of security personnel for construction activities, including no child labor and no forced labor.
 - e. Security personnel engaged in construction activities will follow strict rules of engagement and

code of conduct to avoid any escalation.

- f. A separate workers GRM to allow workers to raise concerns and complaints related to their working conditions, terms of employment and other work-related issues.

3. **Stakeholder Engagement and Grievance Mechanism.**

- a. Continued engagement with stakeholders on construction-related activities to be undertaken
- b. Information dissemination/awareness in the communities in the vicinity of the HCFs, including measures taken to ensure community health and safety, prevent the spread of infection, and contingency plan in case of an outbreak
- c. Information to the public about the use of security forces in the construction activities supported under the project, and that any grievances/complaints/concerns relating to security personnel can be directed to the project GRM.
- d. Awareness about and access to grievance redress mechanism that will among others, address grievances relating to labor influx as well as those relating GBV/SEA/SH.

5.4.3 Operational Stage

1. Delivery and storage of goods: vaccines, samples, pharmaceuticals, reagents etc. and any hazardous material.
2. **Medical management and disposal.**

The PMUHCF and vaccination center will ensure the following:

 - a. Each HCF and vaccination centers are operated in accordance with the IC&HCWMP prepared for the project;
 - b. Waste segregation, packaging, collection, storage disposal, and transport is conducted in compliance with the facility specific HCWMP and WHO COVID-19 Guidelines;
 - i. Onsite waste management and disposal will be reviewed regularly and training on protocols contained in the HCWMP conducted on a weekly basis;
 - ii. The PMU will audit any off-site waste disposal required on a monthly basis and institute any remedial measures required to ensure compliance; and
 - c. Waste generation, minimization, reuse and recycling are practiced where practical in the COVID-19 context.
3. **Protecting healthcare workers.** The PMU, HCF and vaccination centers will ensure the following:
 - a. Regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;
 - b. Ensure protocols for regular disinfection of public rooms, wards, ICUs, equipment, tools, and waste are in place and followed;
 - c. An operation manual should be prepared prior to the opening of isolation rooms to describe the working procedures to be taken by healthcare workers to protect themselves and prevent infection escape while providing treatment. The operational procedures should be of a standard to meet guidance from WHO and/or CDC on infection control: Ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant;
 - d. Ensure equipment such as autoclaves are in working order; and
 - e. Provide regular testing to healthcare workers routinely in contact with COVID-19 patients.

(Additional measures are laid out in the Labor Management Procedure prepared under the Project)
4. **Containment of COVID-19.** The PMU and HCF will ensure the following:
 - a. Quarantine procedures for COVID-19 patients are maintained;
 - b. When practical, COVID-19 patients are given access to phone or other means of contact with family and friends to lessen the isolation of quarantine;
 - c. The public is regularly updated on the situation and reminded of protocols to prevent the spread of COVID-19; and
 - d. Members of the general public (family and friends) who have been exposed to confirmed COVID-19 patients are tested when practical.
4. **Stakeholder Engagement and Grievance Mechanism.**
 - a. Continued engagement with stakeholders on the operation of HCF and other project related activities as per the SEP
 - b. Information dissemination/awareness as per the 'Community Engagement and Risk Communication' sub-component of Component 1 of the project

- c. Awareness about and access to grievance redress mechanism that will among others, address grievances relating to labor influx as well as those relating GBV/Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH). GBV prevention and child protection protocols will be implemented.

5.4.4 Decommissioning Stage

If any temporary HCFs, vaccination centers or medical waste management facilities were established under the project, they will be decommissioned after the end of the outbreak is declared in accordance with regular decommissioning procedures and international best practice. Annex 4 presents guidance on due mitigation measures which will be covered under the sub-project specific ESMPs that would be developed.

6. PROCEDURES TO ADDRESS ENVIRONMENTAL AND SOCIAL ISSUES

The process outlined below follows the relevant requirements of the World Bank's Environmental and Social Standards, especially ESS1, ESS2, ESS3, ESS4, ESS8, ESS10. It provides a mechanism for ensuring that potential adverse environmental and social impacts of sub-projects are identified, assessed and mitigated as appropriate, through an environmental and social screening and management process.

Step 1: Screening potential E&S issues of a subproject and classifying its risk levels

Step 2: Conducting E&S Assessment and Developing subproject-specific E&S instruments:
Procedures and Guidance

- a. Procedures for sub-projects that involve physical interventions and construction work
 - i. Design Considerations when designing HCFs for COVID-19 Response
 - ii. Preparation of Environmental and Social Management Plans for all expansion, rehabilitation and new construction sub-projects.
 - iii. Guidance for E and S due diligence during installation of Solar Cells and BESS Systems in HCFs
 - iv. Environmental and Social Management via Bid Documents
 - v. Management of PCR Chance Finds.
 - vi. Environmental and Social Monitoring during construction
- b. Guidance on Managing E&S Impacts and Infection Control in HCFs during operations on COVID-19 Response.
- c. Incorporating E&S aspect during Procurement of Equipment and Works for HCFs for COVID-19 response.
- d. Procedural Guidance for Preparation of HCF Specific Infection Control and Health Care Waste Management Plans
- e. Procedures for Managing E and S impacts via Technical Assistance subprojects
- f. Management of Occupational Health and Safety (Cross refer to LMP)
- g. Management of COVID-19 Response Related Laboratory Operations.
- h. Management of E and S during CERC Component Implementation

Step 3: Consultation and disclosure of the E&S instruments;

Step 4: Review and approval of the E&S instruments

Step 5: Implementation and Compliance Monitoring and Reporting

6.1 STEP 1: SCREENING SUB-PROJECTS FOR POTENTIAL E&S ISSUES AND CLASSIFYING RISK LEVELS

The main objective of Environmental and social screening of sub-projects is to (a) determine the anticipated environmental/social impacts, risks and opportunities of the sub-project (ii) determine if the anticipated impacts and public concern warrant further environmental/social analysis, and if so to recommend the appropriate type and extent of assessments needed.

All activities undertaken by the project will be screened using the form found in Annex 5 in order to exclude certain risky activities, identify potential environmental and social issues, and classify the environmental and social risks. Copies of each of these screening forms will be kept at the PMU and individual HCFs. The PMU's quarterly report to the World Bank will include copies of each screening undertaken during the subject quarter. The PMUs Environmental Specialist and Social Specialists (E&S Specialists) will assist the MoH in conducting the screening and ensure the screening forms are submitted as a compilation to the

World Bank's Environmental and Social Specialists where guidance is required in the identification of instruments and finalization of screening outcomes.

At the national level, screening is the process by which proposed developments are reviewed to determine the level of environmental and social assessment to which they should be subjected, which could range from none at all up to a full Environmental & Social Impact Assessment (ESIA). At the project level, screening is the process of reviewing a proposed activity against a checklist of factors to determine whether it is likely to have adverse environmental and social effects, and if so, what mitigation measures should be applied.

All subprojects that involve construction will require Environmental and Social Screening to be conducted.

6.2 STEP 2: CONDUCTING E&S ASSESSMENT AND DEVELOPING SUBPROJECT-SPECIFIC E&S INSTRUMENTS:

6.2.1 Procedures for sub-projects that involve physical interventions and construction work

Design consideration

During the design of new units/renovation/upgradation of existing units within HCFs, key design requirements that facilitate optimal internal environmental quality, infection prevention and material/energy efficiency etc should be evaluated.

The guidance provided in Annex 4 looks at the incorporation of Environmental Design recommendations that will assist facilities to ensure continuous supply of power, ventilation and WASH infrastructure that will be essential for continuous operation of the HCFs, isolation units and quarantine centers. Annex 4 also provides guidance that should be used on required measures for functional layout and engineering control for nosocomial infection, considerations for differentiated treatment for groups of higher sensitivity or vulnerable (potentially the elderly, those with pre-existing medical conditions, or the very young) and considerations for those with disabilities, taking into consideration the principle of universal access as and when appropriate, that can easily be incorporated in to the design of HCFs in terms of upgradation, expansion and rehabilitation.

Preparation of Environmental and Social Management Plans

All sub-projects/activities with civil works will prepare ESMPs that will describe and prioritize mitigation measures, corrective actions, and monitoring measures necessary to manage the impacts and risks identified in the screening assessments, IEEs or ESIAs. Where risks and impacts cannot be avoided or prevented, mitigation measures and actions will be identified so that the activities operate in compliance with applicable national laws and regulations etc. and meets the requirements of relevant World Bank standards. Measures and actions that address identified impacts and risks will favor the avoidance and prevention of impacts over minimization, mitigation wherever technically and financially feasible.

The template for ESMPs is provided in Annex 4. The project will ensure that all works contracts will include the ESMPs, and the cost of implementing the ESMPs will be identified as an item in the Bill of Quantities for the respective contracts of physical interventions, guidance on minimal provisions to be included in

contracts in line with the respective ESMPs is presented in Annex 9 and Annex 10 for contractor personnel selection.

An ESMP will be kept as simple as possible, clearly describing adverse impacts, concrete mitigation actions, timelines and responsible persons for implementing identified measures. Basic elements of an ESMP are;

- a. A description of all possible significant adverse impacts that are likely to arise due to the project;
- b. A description of planned mitigation measures, and how and when they will be implemented;
- c. A program for monitoring with measurable indicators that will allow to determine the effectiveness of the mitigation actions
- d. A description of who will be responsible for implementing the ESMP
- e. A cost estimate and source of funds

(Refer Annexes 4, 9 and 11 for guidelines for developing ESMPs)

If the Environmental and Social Screening identifies that the project to be financed would require further assessment - guidance on the ESIA structure is provided in Annex 12. As per the project description, national EIA regulations are highly unlikely to apply to the project. Also, given the emergency nature of the project the need for ESIA's will need to be strongly justified and built into the implementation timeline, as appropriate without compromising the need to respond in a time sensitive manner to a pandemic such as this.

A standalone ESMP only (without an ESIA) is considered appropriate in situations where a detailed environmental analysis is not required as per the findings of the Environmental and Social Screening. All physical interventions under the project and the resulting operation, will mandatorily require an ESMP. ESMPs are to be prepared at the stage of project design and included in bidding documents, to be costed accordingly, and will be part and parcel of contract documents. Activities outlined in the ESMPs will be implemented by the respective investors/contractors implementing the subproject and monitored accordingly by the project management unit during the construction phase. In respect of this project, since armed forces will be involved in construction, these requirements would need to be met by them as well.

Chapter 5 presents guidance on possible impacts to be addressed in ESMPs and Annex 4 contains a generic ESMP for the type of project interventions intended to be funded by the project. This generic ESMP covers all project stages, from design to construction to operation of HCFs to potential decommissioning or demolition of HCFs build as part of COVID-19 response activities.

The relevant HCFs will be responsible for the implementation of processes outlined in the Operational ESMPs which will be also developed as per guidance provided in Annex 4 and the template presented in Annex 5.

In addition, annexures to this ESMF provide guidance on identifying potential impacts and mitigation measures as well as outline required standards to be maintained in terms of environmental and social management during the implementation of activities under the program.

The World Bank Group General EHS Guidelines contain information on cross-cutting environmental, social, health, and safety issues potentially applicable to construction and is available via the following link. https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/ehs-guidelines

Environmental and Social Management via Bid documents

ESMPs will be prepared at the stage of project design and included in bidding documents, to be costed for accordingly, and will be part and parcel of contract documents. Activities outlined in the ESMPs will be implemented by the respective investors/contractors implementing the subproject and monitored accordingly by the PMU during the construction phase.

It is important to ensure the environmental and social specifications and ESMP are included in the bid documents prior to commencement of the bidding process for subprojects where the World Bank's Standard Bidding Documents will be used. This applies to all sub-projects or activities directly implemented by the PMU or Implementing Agencies. It will be necessary to include a provisional sum for the ESMP as part of the Bill of Quantities for those mitigations measure that are not part of the engineering costing. The environmental and social specifications should also include penalty clauses for non-compliance, specifically for complex and large contracts. The procurement staff of the relevant implementing agency and PMU together with environmental and social officer(s) will be responsible for this step.

Management of PCR chance finds

The project is not expected to support any construction or rehabilitation activities that would involve the movement of earth in newly identified sites as everything will be within the existing HCFs (thereby potentially having an impact on tangible cultural heritage), or other activities that could have an impact on intangible cultural heritage.

All ESMPs will include the following Protection and Chance Find Procedures. If any person discovers a physical cultural resource, such as (but not limited to) archeological sites, historical sites, remains and objects, or a cemetery and/or individual graves during excavation or construction, the Contractor shall:

1. Stop the construction activities in the area of the chance find;
2. Delineate the discovered site or area;
3. Secure the site to prevent any damage or loss of removable objects. In cases of removable antiquities or sensitive remains, a night guard shall be arranged until the responsible authorities take over;
4. Notify the Supervising Officer who in turn will notify the responsible authorities (island councils and National Center for Cultural Heritage) immediately (within 24 hours or less);
5. Responsible authorities are in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed by archeologists.
6. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values used by the GoM;
7. Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
8. Implementation for the authority decision concerning the management of the finding shall be communicated in writing by relevant local authorities; and
9. Construction works could resume only after permission is granted from the responsible local authorities concerning safeguard of the physical cultural resource.

Environmental and social monitoring during construction

Monitoring is the continuous and systematic collection of data in order to assess whether the environmental and social objectives of the project have been achieved. Good practice demands that procedures for monitoring the environmental and social performance of proposed projects are incorporated in all relevant environmental and social management instruments. Monitoring provides information on the occurrence of impacts, helps identify how well mitigation measures are working, and where better mitigation may be needed. Each respective E&S instrument prepared will require a monitoring program to be included for the respective activities. The monitoring plan will identify what information will be collected, how, where and how often, and indicate at what level of effect there will be a need for further mitigation. How environmental and social impacts are monitored is discussed below.

- Responsibilities in terms of the people, groups, or organizations that will carry out the monitoring activities be defined, as well as to whom they report amongst others. In some instances, there may be a need to train people to carry out these responsibilities, and to provide them with equipment and supplies;
- Implementation schedule covers the timing, frequency and duration of monitoring are specified in an implementation schedule, and linked to the overall sub project schedule;
- Cost estimates and Source of resources for monitoring need to be specified in the monitoring plan;
- Monitoring methods need to be as simple as possible, consistent with collecting useful information, so that the sub project implementer can apply them.
- The data collected during monitoring is analyzed with the aim of:
 - Assessing any changes in baseline conditions;
 - Assessing whether recommended mitigation measures have been successfully implemented;
 - Determining reasons for unsuccessful mitigation;
 - Developing and recommending alternative mitigation measures or plans to replace unsatisfactory ones; and
 - Identifying and explaining trends in environment improvement or degradation.
- The social, environmental and monitoring specialists will monitor feedback and grievances during the construction process, analyze them and take necessary action to improve processes and methodologies to minimize future issues as part of the risk mitigation strategy.

A set of Monitoring Requisite for the construction phase of subprojects are provided in detail in the following **Annex 11**.

6.2.2 COVID-19 Specific Assessments and Mitigation Measures

Preparation of HCF specific infection control and health care waste management plan

Each HCF financed via the project and associated with project interventions will be required to prepare and implement an HCWM plan, based on the sample found in Annex 8. The preparation of HCF specific HCWMP will be guided via the Generic HCWMP plan for Covid-19 related HCFs, presented in Annex 6. This has been prepared in line with the regulatory requirements of Sri Lanka and in line with WHO, World Bank guidance and other International Best Practice on the sector. Until such time the HCWMPs are prepared, the PMU will ensure full adherence will be maintained to the following documents:

- Management of Schedule Waste under the National Environmental Act
- Water, sanitation, hygiene, and waste management for the COVID-19 virus Interim guidance issues on 19 March 2020 by WHO.

The following timelines will be maintained in the preparation of HCWMP for each facility upon ESMF clearance by the World Bank. All plans will be subject to the review and clearance of the World Bank.

- For all HCFs treating positive Covid-19 patients- within 2 weeks
- For all Quarantine centers in operation-within 1 month
- For all testing centers - within 1 month
- For all HCFs and quarantine centers designated to support covid-19 response in the medium and long term- within 3 months.

Specific guidance on the following key areas on Infection Control are presented in the Generic ESMP which covers HCF operations and need to be included as part of the HCWMP as well.

- Steps to be taken during patient care in HCFs and Quarantine centers
- HCF operation - considerations for differentiated treatment for groups of higher sensitivity or vulnerable (potentially the elderly, those with preexisting conditions, or the very young)
- HCF operation - considerations for those with disabilities, taking into consideration the principle of universal access as and when appropriate;
- Ensuring the rights of Health workers during COVID-19 response in HCFs
- Basic roles and responsibilities of HCWs when working in HCFs
- Additional measure when Managing Exposed HCWs to COVID 19
- Laboratory Operations
- Collection, handling and movement of specimens, samples, reagents, medical equipment, and infection materials.
- Management of Health Care Waste Management
- Management Contaminated Laundry in HCFs
- Management and Cleaning of contaminated Mattresses and Pillows
- Management of Special Beds such as Airflow and special ICU beds used by patients
- Cleaning and Infection control of equipment and utensils used in the care of Covid-19 patients.
- Cleaning of Carpeting and Cloth Furnishings in HCFs that can be contaminate
- Avoiding exposure and contamination from blood spills and bodily fluids during HCF operations and patient care.
- Cleaning and Disinfecting Measures for Environmental Surfaces in Patient-Care Areas
- General cleaning of other areas in HCF as a whole.
- WASH Management

Incorporating E&S aspect during Procurement of Equipment and Works for HCFs for COVID-19 response

The project will enable Sri Lanka to procure essential protective equipment, diagnostics and other essential items. The enhanced supply of these critical items is a key part of preventing the spread of COVID-19.

- **For Works Contracts:**

Before launching the procurement process for the relevant activities and thereafter ensure that contractors and supervising firms comply with the ESHS specifications in their contracts.

Incorporate the relevant aspects of this ESCP, including, inter alia, any environmental and social management plans or other instruments, ESS2 requirements, and any other required ESHS measures, into the ESHS specifications of the procurement documents and contracts with contractors and supervising

firms. Thereafter ensure that the contractors and supervising firms comply with the ESHS specifications of their respective contracts.

- **For All Equipment Procurements:**

Procurement of goods (purchase of testing kits, medical equipment such as oxygen suppliers, PPEs etc.) and consultancy activities for public communications and outreach around COVID-19 can be initiated as early as necessary since these activities have very limited potential to lead to major environmental and social risks. These will be screened independently.

All contract documents for these procurements will ensure cradle to grave provisions for any hazardous substances, technical support and training for operation and associated safety provisions and upon procurement.

Procedures for Managing E and S impacts via Technical Assistance subprojects

All ToRs pertaining to any studies to be undertaken as technical assistance during the project period will be reviewed in accordance with the ESSs of the World Bank's ESF in order to ensure key areas on Environmental and Social considerations aspects are embedded into the studies. All ToRs will be subject to World Bank Clearance.

Managing COVID-19 response related Laboratory Facilities

The laboratories and relevant health facilities which will be used for COVID-19 diagnostic testing and isolation of patients can generate biological waste, chemical waste, and other hazardous byproducts that will be managed as per the HCF specific HCWMP that will be developed. The laboratories to be supported by the project will process COVID-19 and the BSL-3 laboratory that will be set up at the MRI will have the potential to cause illness and lethal harm to the staff and to the community, so effective administrative and containment controls will need to be put in place to minimize these risks.

The Environment and Social Screening will be applied, and an Environment and Social Management Plan will be prepared for the individual laboratory facilities. Environmentally and socially sound management of health facilities will require adequate provisions for minimization of occupational health and safety risks, proper management of hazardous waste and sharps, use of appropriate disinfectants, proper quarantine procedure for COVID-19, appropriate chemical and infectious substance handling and transportation procedures, etc. in line with WHO Interim Guidance (February 12,2020) on "Laboratory Biosafety Guidance related to the novel coronavirus (2019-nCoV)".

COVID-19 diagnostic activities and non-propagative diagnostic laboratory work (e.g. sequencing) should be undertaken in BSL2 labs which is available at the MRI. Virus propagative work (e.g. virus culture, isolation or neutralization assays) will need to be undertaken at a containment laboratory with inward directional airflow (BSL-3 level) which the project will fund to be installed at the MRI. In addition, all specific measures presented for infection control and HCF operations in the ESMP presented in this ESMF, Generic HCWMP presented in Annex 6 and Standard Laboratory Operating Procedures including WHO, WBG, other international guidance documents for the BSL-3 as presented in Annex 13 will be adopted and implemented.

6.2.3 Management of Life and Safety Risk

Use of oxygen therapy (e.g. concentration, cylinder transport, and supply) and PSA plant enhancement activities are potential safety hazards as oxygen in its pure and concentrated form is highly flammable when in contact with a small spark, flame, open fire and can become a potent fire accelerant.

Therefore, adequate and sufficient measures should be taken to mitigate any potential Life and Fire Safety (L&FS) Risk associated with oxygen –related activities (oxygen therapy, PSA plant enhancement).

The following measures should be adopted to minimize and mitigate any identified risks associated with L&FS.

- HCFs, emergency response and any other oxygen therapy related activity should adopt and implement good international L&FS practices.
- All oxygen therapy related activities, PSA facility enhancement, or any other activity using pure and concentrated oxygen should adopt and follow safe transportation procedures, storage of materials and proper waste management and disposal.
- HCFs, and other entities carrying out oxygen therapy related activities should follow hygiene practices and protocols suggested by product manufacturers.
- In order to manage Life and Fire safety (L&FS) risk, the hospitals and other healthcare facilities must update their fire safety measures and ensure that all medical gas, PSA plants, and vacuum system zone valves are
 - functional
 - have appropriate access restrictions/ controls
 - are correctly labeled; and
 - are included in a routine inspection/maintenance program.
- Hospitals and other HCFs must confirm that building designs comply with earthquake specifications, fire escapes, and other fire prevention requirements, have proper smoke exhaust and detectors, drainage, etc. as required in the Construction Industry Development Act No.33 of 2014 of Sri Lanka.
- The hospitals must maintain a plan to deal with fire emergencies, including evacuation protocols, operation of medical gas, oxygen, and vacuum system zone valves, and incident reporting, root cause analysis and corrective actions and audit.
- Hospital Staff training should be carried out on safe handling of oxygen and the emergency response plans
- The HCF should carry out evacuation drills periodically. The evacuation drills should include a well-defined protocol allowing availability of emergency supplies for patients during evacuation or relocation, especially for the elderly, vulnerable patients, and/or those connected to life support equipment.

The World Bank’s EHS guidelines on Life and Fire Safety (L&FS) is an important reference in developing necessary mitigation measures for risks relating to oxygen equipment.

6.2.4 Management of Occupational Health and Safety

As detailed out in the Labor Management Procedure for the Project, measures should be put in place for protecting workers from exposure to the virus that causes Covid-19 depending on the type of work performed and exposure risk. Employers will adapt infection control strategies based on a thorough hazard assessment, using appropriate combinations of engineering and administrative controls, safe work practices, and personal protective equipment (PPE) to prevent worker exposures. Guidance on specific protocols to be adopted by HCFs during the Covid-19 response is presented in the Annexes of this ESMF.

General Guidance for All Workers, including HCF workers, waste handlers, contractors and laborers and employers, including the PMU and MOH are as follows. For all workers, regardless of specific exposure risks, it is always a good practice to:

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol. Always wash hands that are visibly soiled.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Practice good respiratory etiquette, including covering coughs and sneezes.
- Avoid close contact with people who are sick.
- Stay home if sick.
- Recognize personal risk factors. According to the WHO, certain people, including older adults, pregnant female health care workers, and those with underlying conditions such as heart or lung disease or diabetes, are at higher risk for developing more serious complications from COVID-19.

In order to prioritize worker Health and Safety appropriate safety procedures and training in place before the start of each job and to create a workplace where anyone can raise a workplace safety issue or speak up if they have a safety concern.

The following steps should be practiced ensuring adequate safety at minimum.

- Ensure only fully trained and/or licensed personnel are involved in COVID-19 response activities.
- Participate in the risk assessment of possible hazards at the start of each sub-project in line with the Environmental and Social Screening and use the ESMP to deduce and outline specific measures in terms of ensuring OHS during implementation of the specific subproject.
- All HCWMPs need to include, as per Annex 6 adequate provisions on OHS relevant to the operations involved.
- HCFs and vaccination centers are required to ensure adequate supply of PPEs and other measures to ensure safe working conditions for all staff.
- For any high-risk activities (e.g. working on or near exposed live parts) use a *Safe Work Method Statement* that has been developed in consultation with the workers and is easily understood and followed and translated into Local Languages.
- All provisions outlined in the LMP presented in Chapter 7 should be adhered to.

In order to ensure the protecting healthcare workers. The PMU and MOH will ensure the following, in addition to the measures specifically identified in the LMP and Annex 9:

- Regular delivery and proper storage of goods, including samples, pharmaceuticals, disinfectant, reagents, other hazardous materials, PPEs, etc.;
- Ensure protocols for regular disinfection of public rooms, wards, ICUs, equipment, tools, and waste are in place and followed;
- Ensure handwashing and other sanitary stations are always supplied with clean water, soap, and disinfectant;
- Ensure equipment such as autoclaves are in working order; and
- Provide regular testing to healthcare workers routinely in contact with COVID-19 patients.

Refer Annex 2 produced by the MOH for maintaining hygiene

6.2.5 Measures for ensuring equitable access to information and services

- Work with organizations supporting people with disabilities, elderly, women, children, GBV survivors, etc., to develop messaging and communication strategies to reach them.
- Mobilize public health workers, social workers, religious leaders, ‘Friends of Facility’ committees and community leaders to ensure consistent and correct messaging reach even vulnerable groups in hard to reach areas.
- Prepare messages and materials in English and local languages (Sinhala and Tamil) and in accessible formats, like braille/large print, signed videos, text captioning for hearing impaired etc.
- Design information and communication materials in a child-friendly manner to engage children, especially targeting children in quarantine facilities, in rural areas, in institutions/orphanages and remand homes.
- Through proper messaging, address issues of stigmatization and discrimination of people affected by the virus and other groups such as health staff, tour operators etc. and also messages to address fears around being sent to quarantine centers.
- Using data and evidence to dispel rumors and address public misperceptions
- Strengthen existing mechanism for information dissemination and services to provide targeted information, psycho-social support and medical advice to vulnerable groups
- Develop training modules, slide sets and videos for training of health workers, other field level social workers regards understanding the needs and caring for vulnerable groups.
- Training and capacity building of health staff and equip health centers with specialized health services required to treat health conditions of the elderly, those with chronic diseases, the disabled etc.
- Training for social welfare workers and other field level staff to ensure proper isolation, treatment and transportation of suspected cases and avoid spread within homes - particularly from the poor households.
- Development of protocols/code of conduct at HCFs, quarantine centers, isolation centers and vaccination centers on dignified treatment and on minimum servicing requirements, including treatment of vulnerable patients in a dignified manner, irrespective of gender identity, religion, ethnicity, age, etc.
- Project will enforce specific protocols/code of conduct including training of health staff in treating vulnerable patients in a dignified irrespective of their religion and ethnicity.
- Provide ambulatory services, mobility support for community health workers (especially, female health workers), and personal and protective equipment (PPE) to undertake field level follow up and support, in particular to those who are self-isolated or quarantined in their homes.

- Mobile clinics and ambulatory services made available in rural areas with priority given to vulnerable groups.
- Strengthen institutional capacities of eldercare centers, centers for people with special needs and orphanages, including through provision of PPE, hygiene supplies, and logistical support through easy access to testing and essential medicines.
- Engage public health inspectors and public health midwives to reach out to vulnerable groups during planned home visits.
- Referral system for vulnerable persons requiring financial support to other social support/protection schemes and if needed and feasible, financial support to poor households through cash transfers
- Have citizen engagement, feedback, and grievance redressal mechanisms in place.

6.2.6 Measures for addressing GBV, SEA/SH Risks and Impacts

World Bank Group's 'Technical Note on SEA/H for HNP COVID Response Operations,' Inter-Agency Standing Committee's 'Interim Technical Note: Protection From Sexual Exploitation and Abuse (PSEA) during COVID-19 Response,' 'The COVID-19 Outbreak and Gender: Key Advocacy Points from Asia and the Pacific', 'UN Women, 2020 and the COVID-19 resources to address gender-based violence risks', will be used as a guide towards the design and implementation of measures. The project has also partnered with agencies such as UNICEF who are supporting risk communication and have the expertise on issues of GBV/SEA/SH, child protection and reaching vulnerable communities, may also be leveraged to provide technical assistance and capacity building support as needed.

- Conduct Communication campaign related to specific issues women face during the pandemic, including safeguarding and responding to SGBV and child abuse.
- Publicly post or otherwise disseminate messages clearly prohibiting SEA/SH during the provision of health care or during beneficiary selection processes for the cash transfer and vaccination programs. Key messages to be disseminated will focus on : i) No sexual or other favor can be requested in exchange for any services or support; ii) Staff Code of Conduct strictly prohibits all forms of SEA/SH engaging in sexual exploitation and abuse; iii) Any case or suspicion of sexual exploitation and abuse can be reported to the hotline, GM or citizen engagement/feedback mechanism.
- Target high-risks groups for GBV/SEA/SH such as female headed households, women with disabilities, elderly women or women of ethnic minority groups (e.g., Muslim or Tamil Estate workers) by working with Public Health midwives and CSOs which work on women's rights.
- Prepare and implement GBV/SEA/SH and child protection protocols at health centers, especially in isolation centers & vaccination centers as well as include GBV screening so survivors can be referred to support services.
- Implement Codes of Conduct for all staff, information and notices stating zero tolerance on SEA/SH.
- Strengthen GBV and child protection service provision through the increase of help/hotline services.
- Establish minimum accommodation and servicing requirements to meet the needs of people with disabilities, women (especially, pregnant women), elderly, chronically ill, etc
- Attend to the specific needs of female health care workers beyond personal protective equipment (e.g., menstrual hygiene, transport when changing shifts and returning home).

- Train on first responders (i.e. Health workers) who are part of the outbreak response with the basic skills to respond to GBV.
- Train health workers at hospitals, quarantine and vaccination centers who are engaged in administering the vaccine with the basic skills to respond to disclosures of GBV that could be associated with or exacerbated by the epidemic, in a compassionate and non-judgmental manner and know to whom they can make referrals for GBV service provision.
- Make information available to access health service providers, GBV psychosocial support and emergency medical services eg: Mithuru Piyasas, WIN, and accessible and functioning GRM ensuring that it is accessible by female beneficiaries.
- Ensure that the Project GRM will have a mechanism for confidential reporting with safe and ethical documenting of GBV issues.
- Refurbish and strengthen GBV care centers and counselling services at public hospitals and training hospital staff on GBV management
- Make provision for gender-sensitive infrastructure such as segregated toilets and adequate lighting in quarantine and isolation centers. Ensure that COVID19 treatment & quarantine centers and vaccine centers have measures in place to promote gender friendly environment and enhance women and girls' safety. These include, for example having separate rooms/vaccine areas for women, having at least one female staff in place,

6.2.7 Managing risks of use of security forces (military/security forces being involved in project activities in)

As the military is involved in the vaccination program, the project conducted a risk assessment in August 2021 to ensure that adequate measures are in place meeting World Bank's Policy requirements on the use of security personnel. The findings from the risk assessment concluded that the overall E&S risk of involving military as being 'low', given the measures in place to address the associated risks. Based on the findings, the army personnel involved in the vaccination program are professional cadres in the army medical team with the similar educational backgrounds at their MoH counterparts and have been trained by the Epidemiology unit of the MOH on the processes and guidelines to follow during vaccinations. In addition, the army personnel involved have been trained on Codes of Conduct governed by the Sri Lanka Army Act 1949 (also in line with WHO Code of Ethics and Professional Conduct) and on human rights (HR) principles, International Humanitarian Law (IHL) & IHL Universal Code trained by the 'Directorate of HR and IHL' established within the army. In addition to the Codes of Conduct, the army is required to abide by the standing order on instructions to be followed by army personnel involved in the vaccination program issued by the Commander-In-Chief of the Army Infantry Unit. Further, at all vaccination centers operated by the army, complaint reporting hotlines and recording books are available, both the female and male military health cadres are deployed and presence of military police is also mandatory as army personnel involved in public activities have to be accompanied by the military police.

Therefore, the project will ensure the following measures will be in place given the military involvement to manage risks associated with the use of security:

- Screen and identify the risks related to contracting and/or utilizing security forces to support construction of isolation units in the concerned HCFs and vaccination centers (Refer annex 22 for guidance).

- Prior screening of security personnel to be engaged in the Project for their pre-existing health conditions and their past involvements in any form of abuse.
- Training to security personnel on the appropriate conduct and proactive communication with respective target groups and community members; health-related guidelines that they require to comply with; and the personal protective equipment that they have to use while in service prior to their deployment. In this regard, the authorities should introduce a Code of Conduct for the dedicated teams.
- Provide separate accommodation facilities and other logistics for the dedicated COVID-19 operation teams to facilitate social distancing from rest of the security personnel, their families and the community. Regular medical tests should be performed on the assigned security personnel.
- Periodic reviews and assessments of the performance of the security personnel, any incidents reported, and the potential risks associated with the engagement of security personnel. Action against those who have committed unlawful and abusive acts to prevent their recurrence, and to bring compliance with applicable laws.
- Equip project-level grievance mechanism to accept public grievances and complaints related to any unlawful behaviors of the security personnel.
- Raise awareness about the involvement of military and security personnel and the available grievance mechanism to report concerns or complaints regarding the conduct of armed forces. SEP also details the communication strategies to be implemented when military or security personnel are involved in future under the project.

The SEP and LMP also describes relevant protocols & measures to prevent and respond to unlawful/abusive behavior, including sexual exploitation and abuse (SEA)/sexual harassment (SH) or excessive use of force, to ensure that such security/military personnel are adequately instructed and trained prior to deployment; and grievances mechanism to receive, monitor and resolve any complaints regarding the conduct of security/military personnel are also available.

6.2.8 Management of E&S during CERC component implementation

Component 4 of the project is a Contingent Emergency Response Component (CERC). The project ESMF will be updated as soon as the CERC component is activated and the scope of activities financed under the CERC becomes available. In addition, a CERC operations Manuel will be prepared as part of CERC activation to govern the operation of the component, this document will be aligned with the ESMF at the time of preparation and include provisions to ensure environmental and social due diligence in line with the requirements of the ESF. A list of typical positive and negative activities associated with CERC implementation is presented in Annex 14 of this ESMF as per the World Bank's template for CERC Operational Manuals.

6.3 STEP 3: CONSULTATION AND DISCLOSURE OF E & S INSTRUMENTS

Disclosure of relevant project information will help affected communities understand the risks, impacts and opportunities of the Project. As described in the SEP, the PMU will publicly disclose the updated ESMF (Sepetmeber 2021 version) and all environmental and social assessment documentation for public review and comment in appropriate locations, including the MoH's and MoWCS websites. Some of these have already been disclosed and this practice will be continued with. The websites will also enable the

community an opportunity to provide comments electronically. All additional procedures as stipulated in the Stakeholder Engagement Plan (SEP) of this Project will be followed.

6.4 STEP 4: REVIEW AND APPROVAL OF E & S INSTRUMENTS

All ESF instruments listed below will be subject to World Bank prior review and clearance by the World Bank environmental and social specialists assigned to the project. Only cleared environment and social instruments can be included in bidding documents and other procurement instruments. No work can commence on project sites without due clearance of the respective ESF instruments.

- All Environmental and Social Screening Reports
- All ESMPs prepared for project interventions
- All HCWMPs prepared for HCFs under project financing
- All TORs for any Technical Assessments or Studies undertaken in the project lifetime.
- All TORs and subsequent ESIAs, and ESMPs, if these instruments are identified as requirements as per the ESMF.

Upon project commencement the Environmental and Social Specialists of the PMU will be required to prepare a table, tracking all requisite ESF instruments for sub-projects as outlined in the generic template Environmental and Social Instrument Preparatory Tasks Tracking Sheet presented in **Annex 21**. This sheet should be continuously updated and managed by the project PMU and shared with the World Bank's Environmental and Social specialist every quarter or when requested.

While this has not happened so far, the newly recruited E&S specialist will be required to do so as soon as possible

6.5 STEP 5: COMPLIANCE MONITORING AND REPORTING

Supervision of final ESMPs and implementation of HCWMPs for subprojects, along with other aspects of the project, will cover monitoring, review and reporting in order to achieve, among others, the following objectives:

- Determine whether the project is being carried out in conformity with environmental and social and legal agreements
- Identify issues as they arise during implementation and recommend means to resolve in time
- Recommend changes to the proposed concept and the project design, as appropriate, as the project evolves, or circumstances change; and identify the key risks to project sustainability and recommend appropriate risk management strategies.

An appropriate environmental and social supervision plan will be developed aiming to ensure the successful implementation of an ESMF across the project and will be shared with the World Bank. The environment and social team based in the PMU will continue to be responsible for overall monitoring of the ESMF implementation up to the project closure and transfer for management to the designated authority.

Compliance monitoring comprises of on-site inspection of the construction activities to verify that measures identified in the ESMPs are included in the clauses for contractors are being implemented. This type of monitoring is similar to the normal technical supervision tasks ensuring that the Contractor is achieving the required standards and quality of work. Photographic documentation of non-compliance as well as best

practices will be used as a means of recording implementation conditions efficiently, in addition to written evidence.

For HCWMPs, the specific plans will include procedures and criteria for monitoring of implementation. The MOH/Provincial MOH and the individual HCF will be responsible for overall monitoring of compliance of all plans prepared and present via the PMU a quarterly update of the status of plan implementation. This report will be prepared as a summary report covering all HCFs associated with the project.

A standard Environmental and Social Compliance Monitoring Checklist for Project Activities is presented in **Annex 15**. In addition, the Special Monitoring Checklist for Ensuring Safe Conditions for Workers and Public, presented in **Annex 16** should be attached to the main monitoring update presented in **Annex 11**. For all project ESMPs in implementation Annex 11 and Annex 16 must be combined and maintained through intervention commencement in the field to implementation completion. Compliance monitoring reports will be submitted to the World Bank on a quarterly basis for the whole project reflecting the status with regard to each contract/activity.

Regular World Bank missions will include specialists to monitor the project's compliance with World Bank safeguard policies. The progress of environmental monitoring will be formally communicated to World Bank through regular progress reports and updates as per the compliance monitoring agreement made during project implementation.

7. STAKEHOLDER ENGAGEMENT, GRIEVANCE REDRESS AND INFORMATION DISCLOSURE

7.1 STAKEHOLDER ENGAGEMENT PLAN

Since the Project is being prepared under the World Bank's Environment and Social Framework (ESF), as per the Environmental and Social Standard ESS 10 on "Stakeholder Engagement and Information Disclosure", the implementing agencies is required to provide stakeholders with timely, relevant, understandable and accessible information and consult with them in a culturally appropriate manner, which is free of manipulation, interference, coercion, discrimination and intimidation. Accordingly, a standalone Stakeholder Engagement Plan (SEP) has been prepared that defines a program for stakeholder engagement, including public information disclosure and consultation, throughout the entire project cycle including for the cash & in-kind transfer program and the vaccination program under AF. Specifically, the SEP outlines the ways in which the project team will communicate with stakeholders and includes a mechanism by which people can raise concerns, provide feedback, or make complaints about project and any activities related to the project. Additional measures are also included to ensure that the vulnerable groups outlined above will have the chance to participate and benefit from project activities.

7.2 GRIEVANCE REDRESS MECHANISM

For the health program of this project, the Grievance Redress Mechanism (GRM) established under the World Bank-supported Primary Health Care System Strengthening Project (PSSP) is been used as the project GRM which also functions at the National Grievance Management System for Health Services. The GRM is a 4-tier mechanism as per the guidelines developed by MoH for 'Community Engagement and Grievance Redress Mechanism' and the Call Center established at the national level records and monitors the resolution of all grievances. This GRM will be utilized for the vaccination program as well. The GRM is in the process of establishing a mechanism to filter, track and report on project specific grievances. Implementation progress of the GRM is described in the SEP.

For the cash transfer program of this Project, given the emergency nature, all grievances are handled at the Divisional Secretariat level. However, grievances can be submitted to the District Secretariat, National Secretariat for Elders (NSE) or to National Secretariat for Persons with Disability (NSPD). Therefore, while GRM will have 3 tiers to submit grievances, processing of grievances takes place at Tier 1 - Divisional Secretariat level.

The SEP explains in detail the mechanism in place, including the structure of the two GRMs, intake channels for grievances (including submission of anonymous complaints), procedures for resolution of grievances, appeal process, mechanism for informing the complainant, etc., put in place to ensure timely, effective and efficient resolution of complaints and grievances that satisfies all parties involved. The two project GRMs can also receive project-related complaints concerning gender-based violence, including sexual harassment and sexual abuse and exploitation and refer cases to key GBV service providers eg: MoH GBV Care centers (Mithuru Piyasas), NGOs (e.g. Women In Need) etc.

7.3 CONSULTATIONS AND INFORMATION DISCLOSURE

As detailed out in the SEP and consistent with the requirements for stakeholder engagement and taking into account COVID-19 related quarantine and lockdown measures, consultations will be carried out in the form

of household-outreach through SMS, telephone calls, audiovisuals or pictures instead of text, social media, internet-based technology (e.g., zoom), etc. Further, project-specific information (e.g., ESMF, SEP, LMP, site-specific ESMP), will be disclosed in MoHIMS & MoWCS websites as well as World Bank's external website, and will also be available at the individual HCFs, where relevant.

8. INSTITUTIONAL AND INSTIUTIONAL ARRANGEMENTS

8.1 OVERALL PROJECT IMPLEMENTATION ARRANGEMENTS

The Ministry of Health (MoH) will be the executing agency for the Health interventions under the project. The MoH will be responsible for setting policy and standards and updating protocols for managing the COVID-19 response and emergency response of health services for any future infectious disease outbreaks. While the MoH is responsible for implementing the vaccination program, nine provincial departments of health services from the State Ministry of Provincial Councils and Local Government Affairs (SMoPCLGA) are responsible for the implementation of the vaccination program at the provincial and district levels. In addition, the MoH has also involved the Sri Lanka Army Medical Corps (SLAMC) to carry out the vaccination program. Thus, the MoH will be working closely with the SMoPCLGA in the project management structures and directly with the provinces and their department of health services in coordinating, monitoring, and reporting on the project implementation. In addition, the MoH has constituted a Project Steering Committee (PSC), Project Review Committee (PRC) which was established at the MoH jointly with SMoPCLGA to provide oversight, monitor implementation progress and decide on critical actions to address implementation challenges. The committee meets regularly.

Up until May 2021, the project was implemented by the PMU of the on-going Bank-funded Primary Sector Strengthening Project (PSSP) under the MoH. However, subsequent to the last vaccine AF, a separate PMU with a dedicated Project Director, Deputy Director, Finance Manager, Procurement Specialist, Senior accounts officer, and Environmental and Social (E&S) Specialist. The recruitment process for two Procurement Officers will be completed shortly, and a technical consultant for Social safeguards will be hired based on needs. The two E&S specislists desingated from the Directorate of Environment, Occupational Health and Food Safety & Health Promotion Bureau on a part-time basis to help the PMU as an interim measure, will also continue under the new PMU structure who will support the full-time E&S specialist in thier respective areas. As such, this AF will be implemented by the new PMU. In addition, the PMU will cntinue to coordinte to implement activities with other departments and institutions such as:

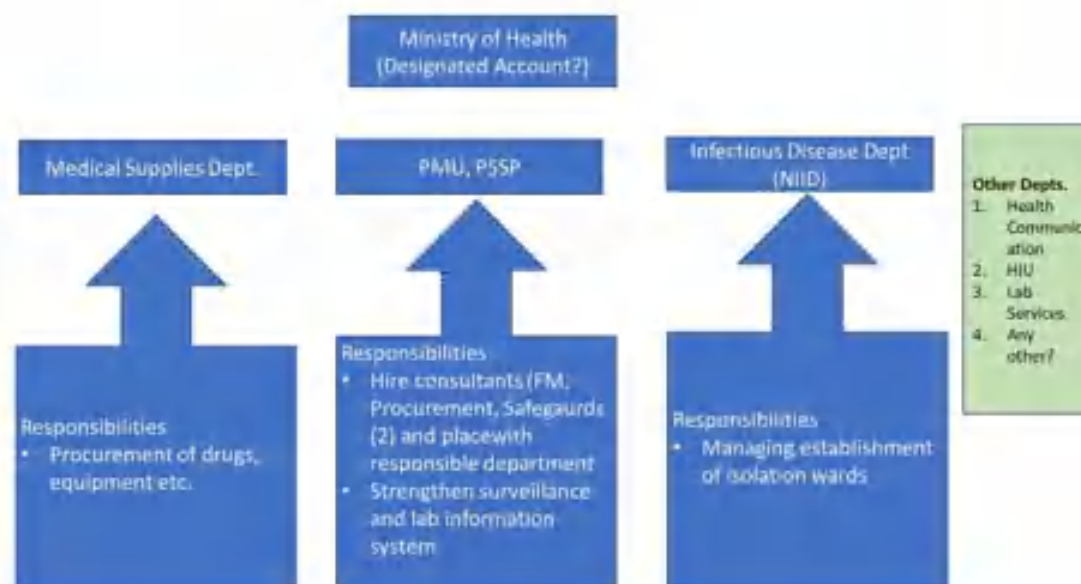
The Director/Deputy Director will coordinate with;

- The Medical Services Department (MSD) for the procurement of required essential supplies
- The Directorate of Environment, Occupational Health and Food Safety, MoH for the preparation and implementation of health care waste management under the project
- The Health Promotion Bureau for risk communication and social safeguard measures
- The Directorate of Laboratory Services for laboratory improvement
- The Directorate of Disaster Management for strengthening of national coordination for emergency response
- The National Epidemiology unit for strengthening disease surveillance and related capacities
- The Directorate of Quarantine services for strengthening the national response for quarantine servicers and;
- Other Directorates as per requirements of the project.

A Project Sub Committee (PSC) at the MOH is established to provide oversight, monitor implementation progress and decide on critical actions to address implementation challenges. The committee will be co-chaired by Director General of Health Services (DGHS), MoH and a representative from the Secretary, MoH's office. Members will include representatives from the Finance Commission, Ministry of Disaster Management, Ministry of Women, Child Affairs and Social Security, National Secretariat for Elders, National Secretariat for Persons with Disability, Department of Probation and Childcare, Ministry of Provincial Councils and Local government, representatives of the Nine provincial Chief Secretaries, and others as per the Management Circular 1/2016 of the GoSL.

An Emergency Response Coordination Committee (ERCC) is also established, chaired by the Secretary to the President. The ERCC provides overall guidance and clearances to the technical team and its implementation plans. It meets at least quarterly to provide oversight, monitor the implementation progress and outline actions to address implementation challenges. The ERCC will be responsible for coordinating with other line ministries including the Ministry of Provincial Councils and Local government as it is important for provincial and regional project staff to be an integral part of the project response and implementation. The ERCC will also coordinate with the Ministry of Power and Energy (MoP&E) on renewable energy systems to be installed, the MWCASS for social safety measures for the elderly, people with special needs and children on probation and orphanages, and the Ministry of Disaster Management, for coordinated emergency response. Representatives of these different Ministries will be members of the committee and additional members will be added considering their role in the implementation of project activities.

Figure 12: Implementation arrangements for the project



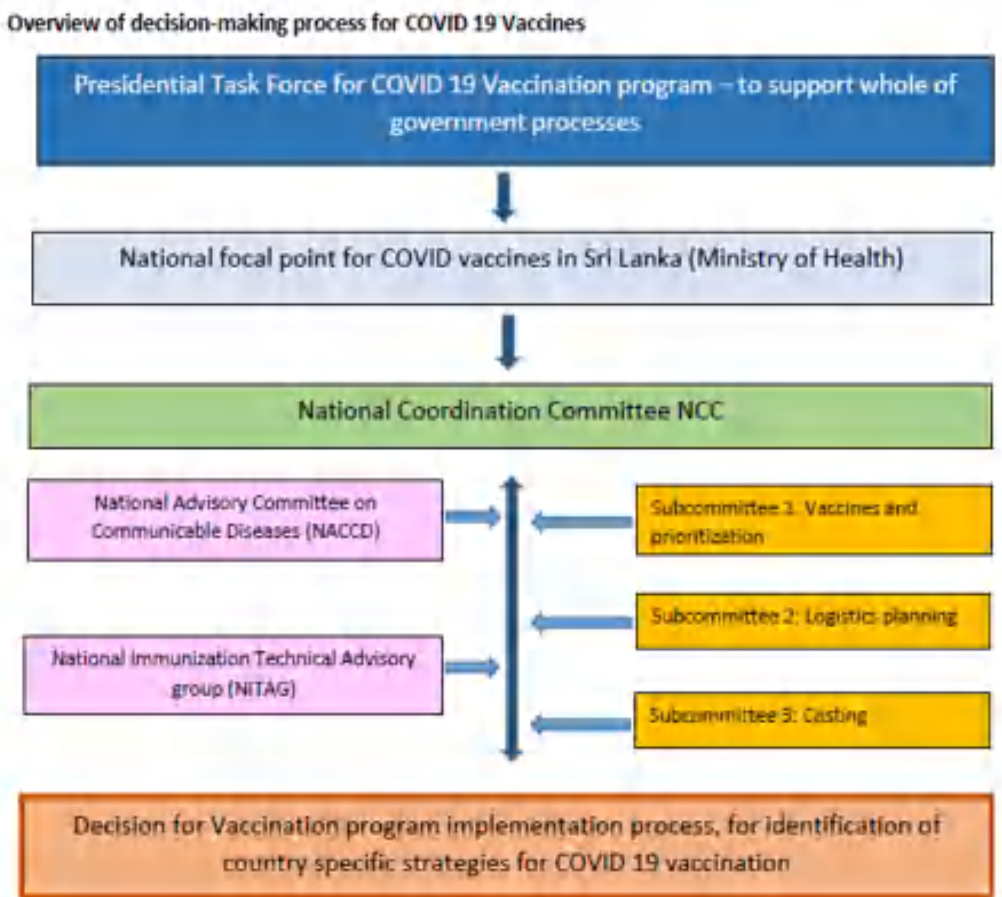
Implementing arrangements for the nationwide vaccination program; The leading implementing agency for the vaccination program is MoH. However, given that the vaccination roll out will take place at

the community level, nine provincial departments of health services from the State Ministry of Provincial Councils and Local Government Affairs (SMoPCLGA) will support this venture to carry out safe and efficient vaccine deployment at the provincial and district levels. In addition, the MoH has also involved the Sri Lanka Army Medical Corps (SLAMC) to carry out the vaccination program. The MoH will be working closely with the SMoPCLGA in in the project management structures and directly with the provinces and their department of health services in coordinating, monitoring, and reporting on the project implementation. The AF for the vaccination program will provide direct support to MoH and SMoPCLGA to facilitate the comprehensive implementation of the entire vaccination program including provincial and district level activities. The provincial councils, while implementing activities, will not be procuring. Project management arrangements used under the parent PMU will remain the same.

As is the case with the parent project, advocacy and communication, including risk communication, will be carried out by the Health Promotion Bureau (HPB), together with relevant programme stakeholders of the Epidemiology Unit, MoH, other health officers, and other partners. HPB has decades of experience and learnings implementing communication activities for the ‘National Immunization Programme’ (NIP) which can be put to use to disseminate timely, accurate and transparent information about COVID vaccines, including information about preparedness, and to manage misinformation in order to alleviate apprehension about the vaccine, ensuring its acceptance and encouraging uptake.

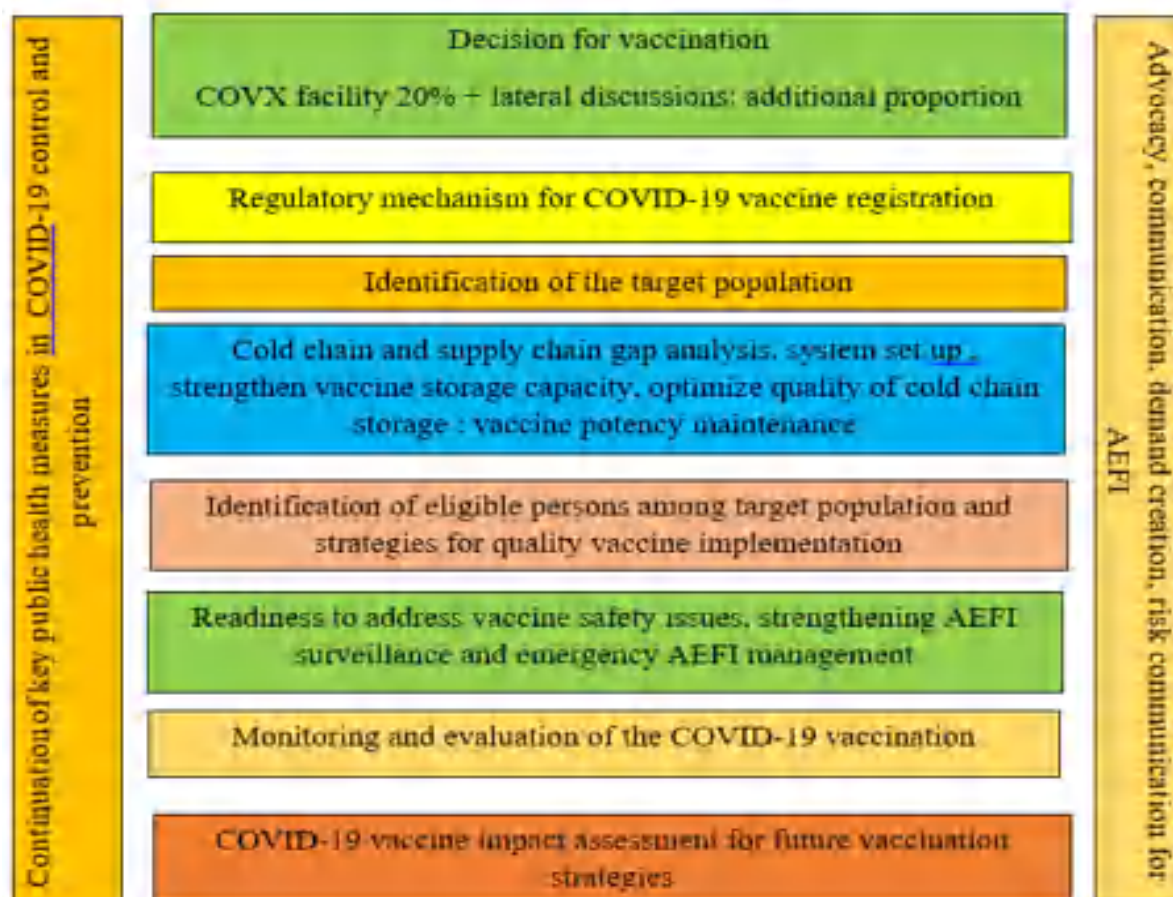
A high-level task force has been appointed to coordinate the implementation of COVID-19 vaccination program. The MoH convened the National Coordination Committee (NCC) for the COVID-19 vaccine in November 2020, including various health and non-health stakeholders with different expertise. The technical oversight, including the choice of candidate vaccines to be deployed in the country, priority population groups, safety monitoring, AEFI, surveillance, etc. is provided by the National Advisory Committee on Communicable Diseases (NACCD) and the National Immunization Technical Advisory Group (NITAG). The NCC has three technical subcommittees: COVID-19 vaccines, prioritization and targeting; logistics for COVID-19 vaccination; and costing for COVID-19 vaccination. The sub-committees contributed to the development of NDVP. Coordination among different stakeholders, such as ministries, universities, hospitals, and development partners, is conducted through this committee

Figure 13: Decision -making process for COVID-19 Vaccines



The NACCD/NITAG, Technical expert working groups and NCC-sub committees are continuously engaged on different subject areas for relevant recommendations and moving forward with COVID-19 vaccination at the earliest appropriate manner.

Figure 14: Overview of COVID-19 vaccine operation plan



The cash transfer program is implemented by the Ministry of Women, Child Affairs and Social Security (MoWCS). The MoWCS is currently implementing the respective cash transfer programs and has streamlined mechanisms developed over years for administering these cash transfer programs. In term of institutional capacity, MoWCS has trained staff up to the Divisional Secretariat (DS) level who are already working towards delivering these programs. The Secretary of Women, Child Affairs and Social Security will provide overall leadership. As the three cash transfer programs (for elderly, disabled and CKDu patients) to be supported from the AF are currently operational and have an established mechanism for targeting, identification, enrolment, payment and grievance redress, the AF will use existing staff and structures as much as possible. No new recruitment will therefore be required for the implementation.

A Project Coordination Unit (PCU) in MoWCS is established by temporarily seconding select Ministry officials to support project coordination and implementation of the cash transfer program under the AF. The PCU comprises of Director, Planning, Chief Financial Officer (CFO)/Officer assigned by CFO, Directors of National Secretariat for Elders (NSE) and the National Secretariat for Persons with Disabilities (NSPD) under the MoWCS and an officer from the National Planning Department (NPD). The Director of Planning in the MoWCS who has prior experience of working in Bank operations will lead the day to day management and overall coordination of the cash transfer program. The Directors of the NSE and NSPD will be responsible for the administration of cash transfer programs and any other COVID-related issues. The CFO or other nominated staff from the Finance unit will be responsible for maintaining

all financial records. The Accounts Officer of SSNP will provide technical support for finalization of accounts related documentation and ensure that their quality is as per Bank standards. The Deputy Project Director along with the Accounts Officer of the Social Safety Nets Project (SSNP - P156056) PMU will also be seconded to this PCU. Additional support staff with experience of working in Bank projects may also be seconded as required. The PCU will be responsible for day to day management and coordination.

The PSC, as outlined under health program of the project will continue to lead project decision making. Similarly, the ERCC established under the health program of the project chaired by the Secretary to the President will continue to provide overall guidance to the project, including on cash transfer activities. The representative of the MoWCS is already a member of both the PSC and the ERCC.

To ensure a transparent process for selection of beneficiaries, village level pandemic response committees have been established at the local government level (4917 wards) or Grama Niladari (14022) level. This Committee comprises of representatives from the local authority, Grama Niladari (Village Officer), Family Health Service Officer, Economic Development Officer, Samurdhi Development Officer and Agriculture Research Officer. The village committees accepted fresh applications and also reviewed the wait list already available with the Divisional Secretary to support the scaled up roll out of the cash transfers. Grievances are also routed to the committee and / or Divisional Secretary for resolution.

The World Bank team through the Social Safety Nets Project (P156056) has undertaken detailed process mapping of these cash transfer programs wherein on-ground implementation, monitoring and grievance mechanism has been mapped out. The team's understanding of these processes will be useful during project monitoring and support. The Bank team comprising of operational and fiduciary specialists will provide day-to-day implementation support to the MoWCS. Regular specialized support as and when required will also be provided. Implementation support missions will be carried on a regular basis.

8.2 ARRANGEMENTS FOR THE IMPLEMENTATION OF THE ESMF

The overall responsibility of implementing the ESMF will be with the PMU established under the Ministry of Health (MoH) for the health program of the project including for the vaccination program. The PMU at the MoH will coordinate with the PCU established at the MoWCS for the implementation of relevant ESMF requirements for the cash & in-kind transfer program.

Hence, implementing the ESMF will be one of PMU's main tasks. The ESMF is a living document and any updates to it must be prior agreed and approved between the Bank and the Government.

- In order to achieve this the PMU needs to maintain dedicated E&S specialists who would be tasked with the primary responsibility of implementing the ESMF through necessary institutional mechanisms. However, the PMU faced a challenging situation of not being able to recruit a suitable candidate for the position for nearly one year and 4 months. As of 30th August 2021, an E&S specialist has been recruited who will be supported by two medical officers seconded by the MOH and who have been attending to ESMF implementation matters in the interim period.
- The PMU will continue liaising closely with the various specialized directorates of the MOH including the military to ensure necessary data and information are shared and collated for reporting to Project Board and the World Bank.
- The PMU will continue working closely with the SMO PCLGA in the project management structures and directly with the provinces and their department of health services in coordinating, monitoring, and reporting on the project implementation. The proposed AF will provide direct

support to MoH and SMoPCLGA to facilitate the comprehensive implementation of the entire vaccination program including provincial and district level activities

1. **The Environmental Specialist and Social Specialist at the PMU** will be primarily responsible for the implementation of the ESCP, ESMF, HCWMP, LMP and SEP of the project. He/she will play a lead role in ensuring;
 - Environmental and social screening is conducted for the project in a timely manner
 - Facilitation of the preparation of environmental and social instruments, such as ESMPs, health care facility specific HCWMPs
 - Requesting for clearances from relevant national authorities where applicable
 - Monitoring/reporting on compliance of due diligence mechanisms
 - Preparation of quarterly compliance summaries and formally communicating to the World Bank on environmental and social and ESF related matters.
 - Designing and delivering relevant capacity building and training to effectively implement the ESMF
 - Ensuring the Implementation of environmental and social management plans and grievance mechanism
 - Ensuring the Implementation of the SEP and ensuring stakeholder feedback is obtained as necessary
 - Liaison with other agencies, contractors and engineering supervisors
 - Management of outsourced consultants recruited to perform specific E&S assessments and any other study

ESMF requirements related to the Cash transfer program will be implemented by the Project Coordination Unit (PCU) designated at the MoWCS under the Director, Planning of MoWCS and will be supported by the Director of NSE & Director of NSPD. The Divisional & District Secretariats, NSE, NSPD & MoWCS will work together to implement stakeholder engagement activities. Thus the PMU at the MoH will work closely with PCU at MoWCS to ensure the implementation of the ESMF in relation to the cash transfer program.

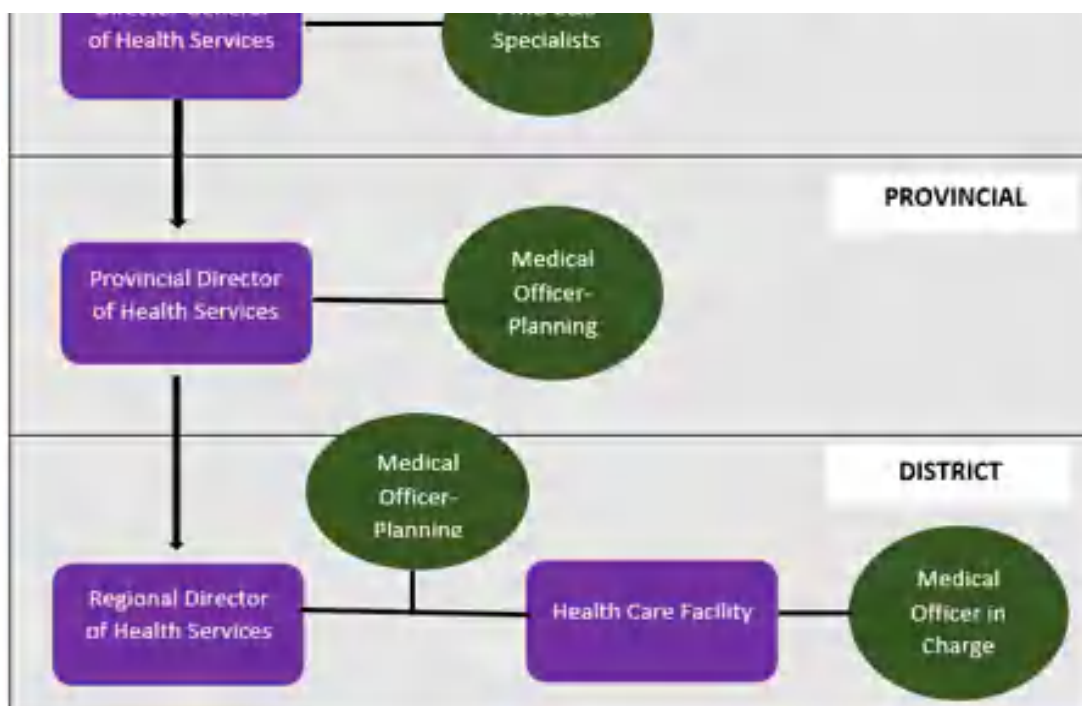
2. **The PMU will continue to work closely with the Ministry of Health and Provincial Ministry of Health State Ministry of Provincial Councils and Local Government Affairs (SMoPCLGA)** which are responsible for the implementation of the vaccination program at the provincial and district levels to ensure the delivery of all components of the ESMF at the HCF level. The diagram below represents the institutional pathway through the central, provincial and district that the PMU shall co-ordinate implementation of the ESMF.

In addition, at the Central Level, the PMU will continue to work in close co-ordination with the following technical arms of the MOH in planning and delivering activities under the ESMF.

- The Medical Services Department (MSD) to ensure required environmental specs in the procurement of required essential supplies such as PPEs, medical equipment, design of facilities
- The Directorate of Environment, Occupational Health and Food Safety, MoH for the preparation and implementation of health care waste management at the HCF level
- The Health Promotion Bureau for risk communication and other social risk mitigation measures
- The Directorate of Laboratory Services for laboratory improvement work and any design, construction and operational compliance requirements thereof
- The Directorate of Disaster Management for ESMF requirements in strengthening of national coordination for emergency response
- The National Epidemiology unit for any ESMF requirements in strengthening disease surveillance and related capacities

- The Directorate of Quarantine services for ESMF requirements in strengthening the national response for quarantine services
- Other Directorates as per requirements of the project.

Figure 15:



All HCFs, as implementing partners, will coordinate with the PMU in (i) conducting environmental and social screening (ii) preparing ESMPs and (iii) preparing and operationalizing HCWMPs including the procurement of necessary waste treatment equipment either directly through offices of the Regional Directors of Health Services. Each HCF will assign the Medical Officer in Charge or an equal level officer as the focal point for ESMF implementation. HCF Management will be responsible for providing information to the PMU on preparing operational ESMPs and taking the lead in preparing HCWMPs. They will also ensure sound implementation of ESMPs during the construction stage via completing monitoring and reporting.

HCFs are responsible to ensure that all guidelines in line with managing COVID-19 response and WHO guidance is adequately implemented. In most cases, HCF teams are going to be the operator of the facilities and therefore will be responsible to ensure that operational phase aspects highlighted in the respective ESMPs and HCWMPs are implemented in close co-ordination with the provincial and regional directors of health service (as per the Draft HCWM policy).

Role of the Central Environmental Authority : Through the ESMP and HCWMP, it is expected that the overall waste management within the HCF can be improved. This should be done with the aim of complying with EPL requirements so that more HCFs will be able to obtain the license through the project. In this endeavor, the PMU should play a facilitating role and obtain the necessary guidance from the national regulator as and when necessary.

Role and Responsibilities of the World Bank

The World Bank project task team, specifically the environmental and social specialists, will provide close supervision and necessary implementation support in the initial stages of the project in conducting screening, preparation of ESIA and ESMPs;

- Undertake prior review of a sample screening reports, ESMPs, HCWMPs, SEP, LMP and other relevant documentation of all project interventions.
- Ensure regular missions to review overall E&S performance and provide further implementation support
- Share knowledge on technologies and best practices
- Provide training support on Bank's safeguard policies and requirements of the project.

8.3 ESF TRAINING FOR STAFF IMPLEMENTING THE PROJECT

In regards ESF training, interim staff have received training on E&S screening, ESMP, HCWM plan preparation, carrying out consultations/engaging stakeholders, GRM operations, labor management procedures etc. In

Going forward, the newly recruited staff will be trained by the Environmental Specialist and Social Specialist of the WB project team on the ESMF implementation, World Bank ESF and procedural requirements of the WB. Training will be provided for the Implementing Agencies on how to monitor and report on environmental and social requirements by the E&S Specialists. They will be also provided training on the use of Grievance Redressal mechanism, consultations. The generic scope required for such trainings are presented in the Session Plan presented in **Annex 17**.

All contractors are expected to disseminate and create awareness within the workforce on ESMP compliance, and any staff training necessary for their effective implementation, specific training on basic Occupational Health and Safety considerations, use of PPE equipment and worker codes of conduct must be conducted. Where contractors do not have existing environmental and social staffs, the PMUs Environment and Social Specialist and team and the implementing agencies will plan for adequate capacity building within the workforce to be involved.

Training on environmental and social management regarding operation of renewable energy and facilities will be provided to the designated authority officials who will in due course manage the operation and are inbuilt into the project modality.

Table 13: Requisite training programs required for implementation of ESMF

Training Program	Target Audience	Conducted By	Minimum Number to be conducted over project period
ESF E-Learning Program- Online Modules	PMU Staff of MOH & SMOPLGA. PCU staff of MoWCS	Online Modules	Completed within the 1 st 2 months post recruitment.

Training Program	Target Audience	Conducted By	Minimum Number to be conducted over project period
ESMF and ESF Implementation Training: to cover world bank environmental and social management procedures, instrument preparation, consultation and monitoring during project implementation and reporting- (including refresher)- Training for Trainers Modality	PMU Staff of MOH. PCU staff of MoWCS.	World Bank Environmental and Social Specialists and team	2 programs at minimum
ESMF and ESF Implementation Training: to cover world bank environmental and social management procedures, instrument preparation and monitoring during project implementation and reporting- (including refresher)	MOH, MoWCS, SMOPLGA staff, PDHS, RDHS HCFs and other IAs as relevant.	PMU ESSS and Team	3 programs
Training on implementation of Environmental Management Plans- Based on the subproject specific ESMPs	Contractor Staff of each subproject, including supervision consultants' environmental officers	PMU ESSS and Team	At minimum once, (prior to the contract commencing on the ground) for each subproject in implementation
Respective Occupational Health and Safety considerations, use of PPE equipment and worker codes of conduct must be conducted.	To all contractor staff during the sub-project implementation	Contractor/Investor	Every 3 months during the contracted project implementation period-specifically targeting the construction phase.
Covid 19 Specific Training Covering Topics Such as • COVID-19 Infection Prevention and Control Recommendations • Laboratory biosafety guidance related to the COVID-19 • Specimen collection and shipment • Standard precautions for COVID-19 patients • Risk communication and community engagement • WHO guidelines on quarantine including case management • Infectious waste management procedures and HCWM within COVID-19 care facilities.	To all HCWs, and relevant	Via external resource persons such as the WHO	Every year during project implementation.

Training Program	Target Audience	Conducted By	Minimum Number to be conducted over project period
HCF level Staff Training-In order to ensure implementation of the HCWMPs	HCF medical staff producing the waste (doctors, nurses and lab technicians), waste workers and waste handlers and teams involved in final disposal should be trained. Nurses and waste handlers are key personnel to instill a disciplined approach in the day-to-day management of wastes.	Via external resource persons such as the WHO	As outlined in the respective HCWMPs for the HCF.
Vaccination roll out program covering topics such as: Designing and operating vaccination clinics facilitating accessibility, having gender-sensitive facilities and providing fair/equitable treatment. Safe administration of the Vaccine and medical waste management. Operationalizing and effective GRM, information hotlines etc. Sexual Exploitation and Abuse/Sexual Harassment & Code of Conduct. Managing Adverse Effects following Immunization (AEFI).	PMU staff, relevant HCF, MoH, SMOPLGA staff and any other relevant staff.	Via external resource persons	Throughout project implementation.

8.4 ROUGH COST ESTIMATES FOR ESMF IMPLEMENTATION

It is difficult to provide accurate cost estimates without full knowledge of the number of E&S instruments and studies that would need to be outsourced. However, given project interventions, the PMU together with project implementing partners in the central and provincial services will be able to complete most of the screening, ESMP and HCWMP preparation internally following the formats and generic plans presented in this ESMF. If in any event, an ESIA or a different specialized study is needed, the PMU will recruit consultancy services to conduct them. Also, if the PMU requires additional capacity to assist in supporting numerous HCFs parallelly, they could opt to appoint environmental and social consultants.

Table 14: Indicative costs of ESMP,ESIS and ESMR

Instrument	Rough Indicative Cost 2020
Environmental and Social Management consultant to prepare ESMF/review ESMF related documents to ease load on PMU	US\$ 150 a day (25,000 – 30,000 a day)
Environmental and Social Assessments for by Local Consultants (per 1 assessment)	US\$ 10,000 (Rs 2,000,000)
Environmental Social Monitoring Report	US\$ 16,000 (Rs 3,000,000)

The associated cost to implement ESMPs will be integrated into the sub-project budget. The project will ensure that all works contracts will include the ESMP, and the cost of implementing the ESMP will be identified as an item in the Bill of Quantities.

In terms of PMU staff that will be hired for the project, related to safeguards component and the indicative salaries are highlighted below.

Table 15: Indicative Costs for staff remuneration

Staff	Indicative Salary (Monthly)
Environmental Specialist	US\$ 1100 at Minimum (SLR 200,000)
Social Specialist	US\$ 1100 at Minimum (SLR 200,000)

Table 16: Other costs

Activity	Cost (SLR)
Material Printing and Designing, including video and visual aids	10,000,000
Training	20,000,000
Transport	Will be on PMU management costs
TOTAL	30,000,000